Clinical Lecture
ON
LITHOTOMY.

Delivered in Addenbrooke's Hospital, Cambridge,

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GENTLEMEN,—The great secret of success in operations, as in all other efforts in life, is a painstaking and careful method of procedure; and in no operation is this more true than in lithotomy. In it the recovery of the patient depends, perhaps more directly than in any other, on the manner in which it is performed. Accordingly, when, thirty years ago, having just emerged from the period of pupilage, I had the good fortune to be appointed surgeon to this hospital, where I knew I should often be called upon to perform lithotomy, I was much impressed with the responsibility of the task, and set about seriously to consider the mode in which it could best be done; and I laid down for myself a plan to which I have ever since closely adhered. A careful investigation of the subject and an investigation of the different modes of operation practised by the most eminent men convinced me that in this, as in most operations, the minimum of deep cutting was the safest course and gave the best results. Reading confirmed what observation had shown me, and what reason had suggested, that, not the brilliant, but the cautious operators were the most successful. I came to the conclusion that in deeply seated parts it is better to make nineteen or twenty cuts, amounting in the aggregate to nine-tenths of an inch, provided that is sufficient, than one cut amounting to an inch. The extra tenth will, now and then, turn the scale against the patient, though the quicker proceeding may seem to tell in favour of the operator.

You saw on Friday last the plan I am in the habit of following. The patient, a middle-aged, healthy man, was admitted on the previous Wednesday, and had not therefore undergone any preparatory treatment, which I think as often does harm as good by depressing the spirits and lowering the bodily tone. He was not very clear as to the duration of his symptoms, but it appeared that they were not of long standing, and the sounding indicated the stone to be small. Why, then, did I not perform lithotrity? I believe it would have been a good case for it, and I was half disposed to do it. But a good case for lithotrity is one in which lithotomy, carefully performed, is attended with very little risk, with quite as little, I believe, as lithotrity. It is less painful, quicker, and more certain; and the greater number of our patients prefer this more expeditious process. I use the common staff with the groove on the convex side in preference to one in which the groove is placed laterally, as recommended by Mr. Liston, because the groove, when on the convex side, is more easily felt in the perineum, and the knife is more easily pressed into it and is less likely to escape from it. A common scalpel is quite as good as any of the variously formed knives which have been employed in this operation; and it is advisable to adhere to a few instruments, just as it is advisable to adhere to a few remedies. By using many of either we merely dilute and waste our experience. The man who uses a few weapons is more likely to wield them skilfully than he who tries, and so perplexes himself with, many. Having made a tolerably free incision through the skin and superficial fascia, I pushed my left forefinger, through the tissue of the perineum, down upon the staff a little behind the bulb, so that I could feel the groove of the staff sufficiently to guide the point of the knife upon my finger-nail into the groove. I then cut a little way along the staff, withdrew the knife, examined with my finger, and, again introducing the knife as before, cut a little more, repeating the process till the part of the prostate nearest to the surface was divided, and till I could insert my finger, alongside the staff, through the prostate, into the bladder. Thus the opening was dilated. It was further dilated by my passing the forceps, beside the finger, into the bladder, which I did after having explored the bladder and felt and ascertained the size of the stone. I make a point of doing this, as it greatly facilitates and gives safety to the further steps of the operation, and, having the advantage of a long finger, I am almost always able to examine the size and position of the stone, and select the forceps accordingly. These should be so made as to hold the stone securely and not let it slip from between the blades; and the blades should be broad, so as to cover the stone and prevent its sides catching and rubbing roughly against the tissues as it is drawn through the wound. In the present instance the forceps did not open easily in consequence of the hinge not being quite free. To have used force in opening these might have endangered the wall of the bladder; so I at once withdrew them and resorted to the scoop, which I guided upon the finger again introduced, and with which the stone was quickly removed. An elastic tube, guided upon the finger into the bladder, was secured there, and removed on the third day. The man has not had the slightest pain or discomfort since the operation, and is doing well.

The points on which I lay most stress are, the pressing the finger down upon the staff in the membranous part of the urethra and guiding the scalpel by it into the groove, the careful cutting into the prostatic part of the urethra, and the completing the operation with the finger and the forceps or the scoop. I rarely do more cutting than this. If it is a large stone, I divide the prostate a little more freely with the knife, and then allow the wound to be dilated by stretching or tearing of the tissues as the stone is drawn through it, which I do slowly and steadily, though I have sometimes to use considerable force. By this plan there is no greater division of the tissues than is absolutely necessary, and there is less danger of ill consequences than if the knife is resorted to. I ought to add that it is necessary to be very careful not to allow the finger, still less the knife, to stray into the loose tissue on the exterior of the prostate. Particularly is this care needed in operating upon children. I am sure that many of the disasters which have occurred in the operations upon young subjects have been caused by the finger pushing its way on the exterior of the prostate and bladder, where the tissue easily gives way before it, and where a cavity is easily made by the finger, which the operator mistakes for the bladder. Into this he plunges the forceps, perhaps seizes the bladder or the rectum, or does some fatal mischief. In a little child it is sometimes difficult to enter the bladder. The tissues are soft, and readily give way before the finger; the bladder seems to be at an unexpected distance, and the operator is unnerved by the difficulty. I can give no more valuable hint than that of preparing a young operator for this difficulty, and of warning him to be content to go slowly on, not to be seduced into quitting the guidance of the staff, not on any account to withdraw the staff till he is certain that his finger is in the bladder, and till he feels the stone with it, but to work quietly and gradually on with finger and knife till he has brought the finger into contact with the stone. Indeed it is a good rule, from which I hardly ever depart, not to allow the staff to be withdrawn from the bladder till the finger is upon the stone, and not to withdraw the finger till the forceps or scoop is in the bladder.* I do not use a very large staff, because it increases the difficulty of passing the finger along it through the prostate. I introduce it with a slight wriggling, rapid, but gentle movement. I am not satisfied unless I hear it strike the stone as well as feel its contact with it. The ear is in this case a better guide than the finger; and if this were more attended to, the cases in which a stone is not found would be fewer. The touch is often deceptive, especially in children, in whom the projecting and slightly roughened rugæ of the bladder frequently communicate, when the sound is passed quickly over them, a sensation to the finger like that given by a stone. I was present not very long ago when an operator opened the bladder and could not find a stone. To my inquiry, two or three times repeated, "Did you hear the staff strike upon the stone before commencing the operation?" the reply was, "Oh, we felt the stone quite distinctly; there was no doubt of that."

* See also observations on this and other points relating to lithotomy, by Dr. Humphry, in THE LANCET for 1864, vol. i., pp. 409, 516, and 625.

Rules in surgery, however, must sometimes be departed from, and judgment and skill may be more shown in the breaking than the observing them. A lad was in the hospital two years ago with severe symptoms of stone, the urine constantly passing. The sound appeared to grate upon something, but we could not hear it strike a foreign body. Several trials gave the same result. The symptoms were so bad that it seemed best, at any rate, to open the bladder and search for the cause. Accordingly, having introduced the staff as usual, and perceived the grating, I cut carefully upon it and along it quite to its end. I could not discover a stone, and I soon became certain that neither my finger nor the staff was in the bladder. The staff, being no longer of any use, was withdrawn. Then my finger touched the end of a rough stone. Supposing that this had escaped from the bladder into the surrounding tissue, I was endeavouring carefully to extract it when it disappeared; and my finger, following it, passed through what was evidently the prostatic part of the urethra into the bladder, and felt the stone there. It was removed without difficulty. It is, as you see, composed of two oval parts, united at an angle of about 100 degrees. Of these one has a nucleus of lithic acid, and lay in the bladder; the other consists of phosphate of lime, and lay in a cavity or urethral pouch outside the bladder; and the bent neck joining the two occupied the prostatic part of the urethra. The staff, no doubt, had passed into the urethral pouch, beneath the calculus, had probably penetrated the delicate wall of the pouch, and found its way into the cellular tissue behind the bladder, into which I travelled along its groove with scalpel and finger. The stone lying in its concavity was not discovered by my finger till the staff was withdrawn. The boy quickly recovered.

You observed last Friday that I quickly relinquished the forceps, and resorted to the scoop. This is an excellent instrument and very safe, because it does not go much beyond the range of the finger. It is not trusted in the bladder without the finger, and is not opened and shut and moved about in the bladder so freely as the forceps are; and, with a little practice, the stone is very easily caught between it and the finger, and drawn through the wound. Even large stones may be thus removed. This stone weighed eight ounces. It is the largest I have ever seen extracted by lithotomy. It is nearly spherical, is rough on the exterior, and was grasped by the bladder so that I could not lay hold of it with the forceps, and should probably have failed to complete the operation had I not fortunately taken with me (it was several miles from Cambridge) this strong well-bent scoop. I contrived to insert it between the bladder and the stone; and it held to the stone so well that with it and my finger I succeeded in gradually drawing the stone through the wound. The patient, a stout farmer, aged sixty-five, recovered without any unfavourable symptom. The handle of the scoop should be large and rough, and the stem round and strong. In some of these scoops I have had the bowl set sideways on the stem, which sometimes facilitates the catching of the stone between it and the finger.

With regard to hæmorrhage: I am in the habit of telling my pupils that hæmorrhage after an operation is almost always attributable to some fault on the part of the surgeon. It indicates that he has not been sufficiently careful in searching for the bleeding vessels, or that he has not properly secured them. This is, at any rate, a very safe doctrine to inculcate; and it applies to lithotomy as well as to other operations; for the vessels which bleed most briskly, and are most likely to give trouble after the patient is placed in bed, are commonly within reach, and may, with care, usually be found and tied. They are the artery of the bulb, or the transverse artery, or some branch divided near the pudic; any of which may be tied. After the removal of the stone I always attend to this point, and sponge out and explore the wound carefully, if there is any bleeding which is likely to give trouble. When the hæmorrhage is from a deeper source than I have indicated—that is, from the neighbourhood of the prostate—it cannot always be arrested; but in such cases it usually ceases spontaneously after a short time, there not being commonly any arteries in this situation sufficiently large to keep up, or to cause a return of, the bleeding.

I leave an elastic tube, passed through the wound, in the bladder, in men, to avoid the difficulty which is sometimes experienced by the patient in voiding urine after the operation. I do this because I was, in several instances, summoned, after a few hours, in consequence of the patient being in severe pain and unable to pass urine; and I was obliged to introduce my finger into the bladder to afford relief. This trouble, which was perhaps a consequence of the small size of the incision I am in the habit of making into the bladder, is quite prevented by the tube. The tube may be removed in two or three days, or earlier if desirable, and is not again required.

In one instance, a gentleman, aged sixty, in whom the operation was unattended with any particular circumstances, there was rather severe inflammation of the bladder ten days after the operation, with discharge of tenacious and semi-purulent mucus. For several days I introduced, two or three times a day, an elastic catheter by the urethra into the bladder, and injected through it warm water, which, passing out at the wound, washed out the bladder. The symptoms subsided; and he was soon quite well, and has remained so. In another case, when the wound was healing, the patient, a farmer, aged sixty-four, had retention, and required the catheter to be introduced two or three times daily. After a time he quite regained the power. In a third patient, a middle-aged man, in the hospital, the symptoms of bladder irritation set in while the wound was healing, and increased in severity, so that I introduced a sound, and, discovering a calculus, I reopened the wound, partly with the knife directed by the staff, and partly with the finger, and removed a rough phosphatic calculus, which I have no doubt had formed in the interval since the first operation, when the stone removed was lithic acid. I mention these cases because it is possible that the symptoms may have been dependent upon the incision in the prostate having been small, and the parts having, in consequence, sustained some injury in the extraction of the stone. I do not know that it was so; and if it was, the occasional occurrence of such events would not induce me to deviate from the practice I am in the habit of pursuing.

With regard to the after-treatment, it is very seldom that any is required. The diet should be, not according to any rule, but regulated by the condition and the desires of the patient. He usually prefers to limit himself to tea, broth, &c., for a day or two; and this generally suits him best. Then appetite returns gradually, and may be yielded to. We do not often find that wine is necessary. The man now under treatment, as I just said, has had no pain or discomfort whatever. Generally some pain is experienced when the urine flows, or at other times; but whether there is much pain or little, whether the patient sleeps or does not sleep, I refrain from giving opium or any other sedative. Pain, even severe and long-continued, though hard to bear, does not seem to do the body much harm. I have often been surprised how little wear and damage it does—not so much, I think, as the sedative which is given for its relief; and the exhaustion of a sleepless, restless night or period is usually followed by sleep, which is more likely to occur naturally at an early period if sedatives have not been used. Under ordinary circumstances a restless night is less damaging than a night of sleep induced by sedative. The patient commonly wakes from the latter paler, weaker, lower, more enervated, and less able to bear pain. I have long had this conviction; indeed, throughout life I have acted upon it. It may be regarded as a prejudice; but I think the patients recover better and quicker, and are less liable to pyæmia, erysipelas, and other unfavourable sequelæ than when they are treated. These, at any rate, we rarely see in Addenbrooke's Hospital; and an immunity from them is, I think, partly due to the practice of non-interference after operations so generally followed in this hospital. You will understand that I make a distinction between the use of opium as a remedy for disease and as a means of relieving pain after operations. In the former case it is a very valuable medicine under many circumstances, one of the most valuable we possess. But in the latter case there is no disease; the pain is merely a natural consequence of the physical injury which has been sustained, or of the local changes which are taking place as a consequence of the injury. The condition will generally subside after a short time; and it is much better to allow it to do so, unless there is some special reason for interference.—It is well to suspend the scrotum, especially in elderly persons, so that it does not become

moistened with the urine, to keep the parts as dry as possible, and to defend them by the occasional use of oil. I do not remember any instance in my practice in which the wound failed to heal soundly within a few weeks, or in which any unpleasant symptom, except slight difficulty in holding the water, followed; or any case in which the rectum was wounded, or in which any troublesome local symptom remained.

ENGLISH MIDWIVES; THEIR HISTORY AND PROSPECTS.

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CHAPTER IV.—SEVENTEENTH CENTURY (*continued*).

Mrs. Jane Sharp.

THE first English midwife who attempted to enlighten her sister practitioners, by publishing a book upon midwifery, was Mrs. Jane Sharp, of London. She dedicated her work to Lady Ellenour Talbutt; and it was published by Simon Miller, at the Star, at the west end of St. Paul's, in 1671, under the title of "The Midwives Book, or the whole art of Midwifery discovered; directing child-bearing women how to behave themselves." Mrs. Jane Sharp describes herself as "a practitioner in the art of midwifery above thirty years." She begins her volume with an address to the midwives of England:—

"Sisters,—I have often sate down sad in consideration of the many miseries women endure in the hands of unskilful midwives; many professing the art (without any skill in anatomy, which is the principal part effectually necessary for a midwife,) merely for lucre's sake. I have been at great cost in translations for all books, either French, Dutch, or Italian, of the kind. All which I offer with my own experience; humbly begging Almighty God to aid you in this great work; and am your affectionate friend,

JANE SHARP."

After this follows an introduction upon the necessity and usefulness of the art of midwifery.

"The art of midwifery," she says, "is doubtless one of the most useful and necessary of all arts for the being and well-being of mankind, and therefore it is extremely requisite that a midwife be both fearing God and faithful, and exceeding well experienced in that profession. Her fidelity should find not only a reward here from man, but God hath given a special example of it in Exod. i. in the midwives of Israel, who were so faithful to their trust that the command of a king could not make them depart from it—viz.: 'But the midwives feared God, and did not as the king of Egypt commanded them, but saved the men-children alive. Therefore God dealt well with the midwives; and because they feared God he made them houses.'

"As for their knowledge, it must be twofold, speculative and practical. She that wants the knowledge of speculation is like to one that is blind, or wants her sight; she that wants the practice is like one that is lame, and wants her legs. The lame may see, but they cannot walk; the blind may walk, but they cannot see. Such is the condition of those midwives that are not well versed in both these. Some perhaps may think that then it is not proper for women to be of this profession, because they cannot attain so rarely to the knowledge of things as men may, who are bred up in universities, schools of learning, or serve their apprenticeships for that end and purpose, where anatomy lectures being frequently read, the situation of the parts both of men and women, and other things of great consequence, are often made plain to them. But that objection is easily answered by the former example of the midwives among the Israelites; for though we women cannot deny that men in some things may come to a greater perfection of knowledge than women ordinarily can, by reason of the former helps that women want, yet the Holy Scriptures hath recorded midwives to the perpetual honour of the female sex. There being not so much as one word concerning *men-midwives* mentioned there that we can find, it being the natural propriety of women to be much-seeing in that art; and though nature be not alone sufficient to the perfection of it, yet farther knowledge may be gained by a long and diligent practice, and be communicated to others by our own sex. I cannot deny the honour due to able physicians and chyrurgions, when occasion is; yet we find even that amongst the Indians, and all barbarous people, where there is no men of learning, the women are sufficient to perform this duty; and even in our own nation, that we need go no further, the poor country people, where there are none but women to assist (unless it be those that are exceedingly poor, and in a starving condition, and then they have more need of meat than midwives), the women are fruitful, and as safe and well delivered, if not much more fruitful, and better commonly in childbed, than the greatest ladies of the land.

"It is not hard words that perform the work, as if none understood the art that cannot understand Greek. Words are but the shell that we ofttimes break our teeth with them to come at the kernel—I mean our brains to know what is the meaning of them; but to have the same in our mother tongue would save us a great deal of needless labour. It is commendable for men to employ their spare time in some things of deeper speculation than is required of the female sex; but the art of midwifery chiefly concerns us, which even the best learned men will grant, yielding something of their own to us when they are forced to borrow from us the very name they practise by, and to call themselves man-midwives.

"But to avoid long preambles in a matter so clear and evident, I shall proceed to set down such rules and method concerning this art as I think needful, and that as plainly and briefly as I possibly can, and with as much modesty in words as the matter will bear; and because it is commonly maintained that the masculine gender is more worthy than the feminine, though perhaps where men have need of us they will yield the priority to us, that I may not forsake the ordinary method, I shall begin with men, and treat last of my own sex, so as to be understood by the meanest capacity, desiring the courteous reader to use as much modesty in the perusal of it as I have endeavoured to do in the writing of it, considering that such an art as this cannot be set forth but that young men and maids will have much just cause to blush sometimes, and be ashamed of their own follies, as I wish they may if they shall chance to read it, that they may not convert that into evil that is really intended for a general good."

Mrs. Sharp's book is a 12mo of 418 pages, in six books. Each book contains chapters varying in number from six to eighteen. A few extracts from it will show some of the peculiarities of her practice.

"The eagle stone held near the privy parts will draw forth the child as the loadstone draws iron, but be sure, so soon as the child and after-burthen are come away, that you hold the stone no longer, for fear of danger."*—p. 198.

"It will be profitable, when a woman hath had a sore travel, to wrap her back with a sheepskin, newly flead off, and let her lig in it; and to lay a hareskin, rub'd over with hare's blood newly prepared, to her belly."

Mrs. Sharp was a believer and expert in astrology. Speaking of tables for calculating the influence of the planets upon the birth, she says, "I have found no table concerning this business have any truth in it; wherefore I have drawn forth one exactly, which you may rely upon," which extraordinary production may be found at page 149.

A fourth edition of this book, printed after Mrs. Sharp's death, contains the following address from the publisher to the reader:—

"The constant and unwearied industry of this ingenious and well-skilled midwife, Mrs. Jane Sharp, together with her great experience of anatomy and physick, by the many years of her practice in the art of midwifery, hath sufficiently recommended her labours, and made them more than ordinary useful, and much desired by all that either

* The following passage, translated from Saxon by the Rev. O. Cockayne, in his "Leechdoms &c. of Early England," shows that at a very early period products of the vegetable kingdom were supposed to possess this miraculous power:—"In order that a wife may quickly bring forth, take seed of coriander eleven grains or thirteen, knit them with a thread on a clean linen cloth; let then a person take them who is a person of maidenhood, a boy or a maiden, and hold them at the left thigh, near the nature, and so soon as all the parturition be done, remove away the leechdom, lest part of the inwards follow thereafter."—Vol. i. p. 219.

knew her person and experienced her artful skill, or ever read this book, which of late by its *scarceness* hath been so much enquired after, will, I question not, be so much valued and esteemed by all as to have many after impressions.—I am your well-wisher, J. R."

This edition is embellished with a frontispiece divided into three parts. The first represents a woman in bed after delivery, the midwife sitting beside her and offering a basin with a spoon in it. A woman is standing before the fire warming a towel; another is attending the baby in a cradle. The second part is a christening procession, the midwife walking in front with the child; ladies and gentlemen, arm in arm, follow, the former with fans in their hands. The third delineates a christening feast; the party is sitting round a table having bottles and glasses upon it, the parson in bands and gown being the most prominent figure.

No mention is made of Mrs. Jane Sharp in the biographies of Sue or Delacoux, nor is her book much quoted. Willughby, however, severely criticises her method of treating arm-presentations, although he approves of her medical treatment of menorrhagia and convulsions.

Miss Willughby.

One of Percivall Willughby's two daughters was instructed by her father in the art of midwifery, and if the account he gives of her be not too partial, we must conclude that she, under his able tuition, became an accomplished midwife. Some idea of the difficulties she had to encounter in obtaining her knowledge may be gathered from the following observation written by her father in 1655: "I was sent for from Stafford to come to a lady beyond Congerton. Her midwife had kept her several days in labour. I took my daughter with mee. Wee travelled all night, and wee were wetted with much rain to our skins. Wee came by break of day to the place. But this lady was dead, undelivered, before our coming."

Soon after this Miss Willughby removed with her father to London, for in 1658 we find her attending a Mrs. Wolaston, a watchmaker's wife, by the Old Exchange, in "Threedneedle-street, who had had much tugging and struggling usage" from her midwife in previous labours. Mrs. Wolaston had a happy and speedy delivery, so much so indeed that "shee began to grieve and complain (not imagining the child was born), and to say, 'Now I shall fall into my old paines and sufferings, and perceive that it will be no better with mee.' My daughter smiling (says Willughby), asked her what shee meant, and whether shee had two children, for one was born. She scarcely believed it, until that shee heard the child to cry. The after-birth being fetched, and shee laid in her bed, 'shee took my daughter by the hand, and said to her, 'Surely you have art in these fingers, otherwise so quickly and happily I should not have been delivered.' "

In this same year we find Miss Willughby attending a lady in her confinement during which an interesting scene took place. It is thus described by her father:—"In Middlesex, anno 1658, my daughter, with my assistance, delivered Sir Tennebs Evanks lady* of a living daughter. All the morning my daughter was much troubled, and told me that shee feared that ye birth would come by ye buttocks. About seven o'clock that night labour approached. At my daughter's request, unknown to the lady, I crept into the chamber upon my hands and knees, and returned, and it was not perceived by ye lady. My daughter followed mee, and I being deceived through hast to go away, said that it was ye head, but shee affirmed the contrary; however, if it should prove ye buttocks, that shee knew how to deliver her. Her husband's great Oliverian power, with some rash expressions that he uttered, flowing too unhandsomely from his mouth, dismayed my daughter.† She could not be quieted until I crept privately again the second time into ye chamber, and then I found her words true. I willed her to bring down a foot, the which shee soon did, but being much disquieted with fear of ensuing danger, shee prayed mee to carry on the rest of the work."

At this period the man-midwife was not employed in ordinary cases, his assistance being only sought when instrumental interference became necessary. A deeply-rooted prejudice against the male practitioner in midwifery existed at this time, and the midwives themselves, although they were glad enough to have his assistance when in difficulties, were, on all other occasions, more violent than any other class in denouncing him. In the instructions of a famous and dying midwife to her daughter,* a case is related in which she consented that a chirugion should be called in, provided that the patient might not see him, being fearful lest she should die with apprehension and shame. In this instance the midwife persuaded her patient to slide down towards the foot of the bed, and darkened the room on that side where the man-midwife was to come. She would have him perform his work as Willughby did, unknown to the lady, "So that it be concealed from the woman all her life long; nor that she see the chirugion any more."

Little more is known of Miss Willughby except that both she and her sister were married, the one to Mr. Hart, and the other (the younger) to Mr. Burton, of Derby.

Mrs. Willughby.

Dr. Willughby describes this lady as "a good kinswoman of mine (Mrs. Willughby) that was a long experimented midwife, of much practice, and of good repute with women, dwelling in Westminster and London. In speaking of the proper method of delivering a woman of twins, he says: "This good woman assured mee that shee had laid severall women of twins, and that shee never forced the second birth by breaking of the waters, and that shee had left these women for six houres or longer, and after her comming again that then shee had delivered them safely of the second child." This plan of treatment, it may be added, however, he did not approve of.

In Willughby's writings the names of many of the midwives with whom he came in contact are to be found. "Goodwife Spencer," "Midwife Heywood," and "Midwife Gretton," all of Derby. "Margaret Kempe, midwife at Abbot's Bramley," "Ann Bradford, at Walton, midwife," "Mrs. Shaw, midwife, of Stafford." "Felice Hollinghurst, midwife at Eudgeley in Staffordshire," "Elizabeth Walthur, of Stafford, a butcher's wife," "Elizabeth Korkin," who must have practised in London or its neighbourhood, for by her "strugling, halings, and enforcements," she so injured a woman that she had to be taken to St. Thomas's Hospital in the year 1659. And one Mrs. Shaw, of whom he writes as follows: "There was a scandalous report in London with which an old midwife was spotted; that, through a mistake, instead of the after-birth shee pulled away the womb, of which the woman died. But I will not bee so injurious to old midwives as to give credence to such unworthy reports. Although I know assuredly that some of them do not (as they should) understand their practice and dayly undertakings." In the Sloan MS., after relating the doings of two ignorant midwives, he adds, reiterating the sentiments of Andrew Boord and the two Peter Chamberlens, "I could heartily wish yt some publick good order might be made for ye better educating of all, especially ye yonger midwives, for ye helping and saving of mothers and their children. When ye meanest of ye women, not knowing how otherwise to live, for the getting of a shilling or two to sustain their necessities, become ignorant midwives, their travailing women suffer tortures. It would be better to make such midwives nursekeepers, rather than (such as they would be called) midwives."

Mrs. Labany.†

This Royal midwife attended Mary of Modena, Queen of James II., when she was delivered, on June 10th, 1687, of James Francis Edward, afterwards called the Pretender. Dr. Hugh Chamberlen was to have been present, but, happening to be away seeing a patient at Chatham, he did not return in time. The Prince was by many believed to be a suppositious child; and Mrs. Labany was accused of having brought the infant into the bed, some said out of a warming-pan, and others through a door at the back of the bed. Dr. Chamberlen, however, in his letter to the Princess Sophia,‡ showed the absurdity of this hypothesis. However much Mrs. Labany may have been blamed for her supposed treachery to the nation, she received from the King,

* This lady is described in the Sloan MS. as "wife to one of Oliver's creatures."

† From the Sloan MS. we learn that the unhandsome words were these, "What luck had he to be deluded by children and fools."

* The Compleat Midwife's Practice. 1659.

† Or De Labadie. Strickland's Queens, Bohn's Edition, vol. v., p. 68.

‡ Sloan MS., 4107, p. 150.

at the hands of Sidney Lord Godolphin, the enormous fee of 500 guineas*—a sum more than sufficient to recompense her for her skill and compensate her for any pecuniary losses she may have sustained through her character being misrepresented.

Mrs. Wilkins.

This name must be added to the list of Royal midwives; for the Report of the Historical Commission, part i., p. 44, says that among Lord Mostyn's collection of news-letters &c. from 1673 to 1692, is a notice "of the birth of the Prince of Wales (son of James II.), and a fee of 500 guineas to Mrs. Wilkins, the midwife." It will be observed that this is the same sum as that granted to Mrs. Labany. It was not unusual for several midwives to be in attendance, and it would seem that the same fee was granted to all, whether they were actively employed or not.

NOTES
ON THE
GENERAL PRINCIPLES OF CUTANEOUS THERAPEUTICS.

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CLASS II.

So much for the general principles of treatment in purely local diseases. I now come to speak of what I have termed the mixed class of cutaneous affections, the components of which are very numerous—i.e., those which are essentially local, but are influenced by the state of the system at large. These demand, for their relief, a judicious combination of general and local treatment. In many instances, a disease excited by a local cause—i.e., intertrigo, eczema simplex—occurs in a badly nourished subject; and the mal-nutrition of, or mal-elimination in, the patient prevents the progress towards cure, which should, if regard be had to the local mischief itself, speedily happen. There are one or two special points in the therapeutics of these cases. I may say generally that in these diseases the proper treatment is that which we adopt for pyrexial diseases in other parts of the body in the early stages, and is subsequently such as is of a tonic nature, and finally that which is calculated to remove chronic inflammatory thickening or the like. But there is something more than this to be considered. It is not enough to adopt a treatment recognised as suited to a particular disease. There are a number of influences that modify disease in different subjects, and that require to be carefully attended to. These influences are of very common operation, and arise out of the peculiarities of the patient. The dermatologist must determine not only what is best for individual cases, and how far the specific or formulated treatment for particular diseases should be added to, or modified, to suit these diseases in particular individuals. In fact, the treatment of the cases of skin diseases now under notice should be a combination of the remedies suited specially to the particular disease present, with those suited to the concomitants of the individual case. The following are the modifying influences to which attention should be given.

Firstly. It is important to recognise the great influence which scratching possesses in exaggerating certain diseases. Nothing is of more consequence than the use of special remedies calculated successfully to allay the irritation which forces the patient to scratch, and to protect and to soothe the parts when scratched.

Secondly. The influence of general debility is at work not only to retard recovery in, but to favour the development of many diseases to a more severe degree than would otherwise be the case. It is not a question of debility *producing* this or that malady, but *modifying* the same. The debility may express itself mainly in the form of anæmia, want of nerve power, &c.; and special and appropriate remedies given with a view to meet these several states will lead to an improvement in the general health, and thus indirectly favour the cure of any diseased condition about the skin; for it does not need any proof from me that the nearer a man approaches in his condition the standard of health, the sooner and more certainly will he throw off any disease about him, be it in his outer or inner surface or parts. But in practice we much forget that the specific should be linked with general treatment. And the relief of the debility of persons afflicted with diseases of the skin is to be accomplished not only by the use of medicines, but by mental and bodily rest, change of air and scene, and the like. These matters are by no means sufficiently considered.

Thirdly. Every attention must be paid to dyspepsia as affecting the origin and course of skin diseases. It gives rise, of course, indirectly to debility, to torpid action of the liver, to the generation of acridities that float about in the blood, and circulate freely through the skin to disorder it; and, lastly, it increases cutaneous hyperæmia by reflex action. Dyspepsia must therefore be regarded as a powerful intensifier of all hyperæmic skin diseases.

Fourthly. The circulation of retained excreta is always a cause of intensification of hyperæmic conditions. The blood charged by excreta, in passing through an eczema or a psoriasis, will irritate it, if I may so say, and thus necessarily tend to give it an inflammatory character, whilst the progress towards cure will be retarded. I believe this to be one of the most important of all points to be attended to in treating diseases of the skin, and the principle is of almost universal application. It is a matter of common sense (but matters of common sense are apt to be very much neglected) that a poisoned blood-current—poisoned, i.e. "charged," with bile or nitrogenous matters which we know must disorder the tissue nutrition and vascular tension—will not permit the cure to be accomplished so easily as if the blood were uncharged with the same elements; and the removal of the latter will help the cure of disease, and that oftentimes in a marvellous manner. Now, whence the excreta to charge the blood? From (*a*) defective assimilation, as in dyspeptics, torpid liver action, and from excessive waste; or (*b*) from defective excretion, by the skin, the kidneys, and the liver. The skin has to get rid of a certain amount of effete products; and if the skin acts sluggishly or scarcely at all, this may impurify to some degree the blood-current. So, again, deficient kidney action tells its own tale. The non-excretion of bile products in the usual way, and their passage into the blood-current to circulate within it, is another cause of skin mischief, as in some cases of erythema, urticaria, and probably purpura. The severest case of general eczema I ever saw was excited by the circulation of bile through the skin in connexion with a most marked attack of jaundice. Of course in such a case the influence of the retention of the non-eliminated products is readily appreciated, but in other cases readily overlooked. There are minor degrees of blood-impurification by bile, urea, and the like. It seems to me that the treatment of diseases of the skin is essentially the physician's work and not the surgeon's, for the very reason of the connexion between skin maladies and functional and structural changes in internal organs.

Fifthly. Deficient renal action, particularly in reference to the quantity of fluid discharged, is another matter of prime moment in regard to skin diseases. I am convinced that we do not, when the skin is disordered, sufficiently make use of the kidneys to relieve the skin of its work. There are three conditions in connexion with diseases of the skin in which the kidneys should be freely stimulated to active excretion of fluid: (1) Where, in consequence of organic disease of the heart or other cause, and in connexion with a sluggish circulation, there is a distinct tendency to fluid accumulation in the tissues. (2) In all cases of hyperæmic skin disease, and in the early stages of inflammatory diseases, where the blood tends to accumulate in the skin in connexion with pyrexia. And (3) in diseases of the legs, where there is the slightest tendency to local or general œdema. In inflammatory diseases of the leg diuretics greatly counteract the injurious effects of mere gravitation, and they tend to relieve the engorged tissues. Diuretics are useful under all these circumstances, and emphatically so where the quantity of urine is already deficient. But I hold that in diseases of the skin generally a deficiency of urine calls for free stimulation of the kidneys to relieve the disordered skin of its work as much as possible. Of course

* Secret Services of Charles II. and James II., p. 198.

where there is free circulation with the blood of retained excreta the necessity for free kidney action is increased tenfold. The liberal administration of diuretics in a case of eczema of the legs in a gouty subject will often act like magic when all other remedies fail.

Sixthly. Gout and rheumatism have their special influence upon skin diseases. I might have referred to these modifying influences under the last head, for it is the excess of uric acid in the one and the presence of lactic or an allied acid in the other case, and the circulation of blood charged with these products through the skin, that cause special mischief in skin diseases, *and give an inflammatory or irritable aspect to them*. The older practitioners, in attributing to gout and rheumatism the causation of disease which we now deem independent of them, were even nearer the truth than are some modern observers who hold excessive belief in the local origin of disease. If gout does not *produce*, it often *modifies* skin mischief, as above stated; and, after all, our forefathers were only at fault in regard to the use of terms. It is not an uncommon thing to have this or that eczema or psoriasis or lichen called gouty eczema, gouty psoriasis, gouty lichen. Practitioners have found that by treating patients affected by these forms of disease for gout or rheumatism, as the case may be, the maladies have often speedily vanished when other measures have failed. They have imagined that the gouty blood has caused the disease. It would be more correct to say it modified, it irritated, the disease, and so prevented the cure from taking place. With this explanation there can be no difficulty in seeing that gouty and rheumatic dispositions exaggerate hyperæmic conditions in skin diseases, and give an inflammatory aspect to them very frequently. The removal of gouty influences must aid the cure of skin diseases.

Seventhly. The tuberculous and the strumous diatheses also, it must be remembered, considerably modify certain skin diseases. The tendency in the phthisical and phthisically inclined and in the strumous is to a particular perversion of cell-growth in certain of the tissues, and notably the fibro-cellular: I refer to the tendency to the production of pus. Now it will be readily understood that this must have much influence upon local tissue-change in skin disease. Given the occurrence of a local inflammation in a non-strumous and a strumous subject, there will be differences in the two instances accounted for by the operation of the pus-producing tendency in the one and not in the other. It must be so. The tendency to the morbid cell growth, which may not have shown itself in action before, will be likely to do so when nutrition is disturbed by local inflammation, disordered innervation, &c., as the case may be. The strumous tendency takes occasion by the perversion of local nutrition to give evidence of its presence and to complicate matters. Of this fact experience assures us. Take the case of an eczema: if it occurs in a strumous subject, it is accompanied by free pus-production. Acne in a non-strumous and acne in a strumous subject are different. In the latter case, the fibro-cellular textures of the wall and about the gland are implicated and inflamed, often presenting the appearance of the livid-red and indolent tubercular swelling of a strumous tubercle, whilst the acne spots suppurate freely and leave behind scars, indicative of the tendency to ulceration, which is another feature of the strumous habit. This is a simple but it is an important point in therapeutics, and, because simple, often disregarded as of no moment. In psoriasis, in strumous subjects, the tendency to the production of pus is seen, and in this statement I am confirmed in my original opinion by my friend Dr. R. W. Taylor of New York, an excellent observer and worker. Therefore, in regard to phthisical and strumous subjects, whilst one treats the local disease, be it eczema, erythema, lupus, acne, or psoriasis, it is of great use to neutralise, by the conjunction of anti-strumous remedies, the bias of the general nutrition towards free pus-production, which will of course express itself in proportion as the diathesis is marked and the local derangement of nutrition severe.

Eighthly. An old syphilitic taint is to be carefully detected and dealt with in reference to skin diseases. This should be recognised as a distinct and special cause of chronicity in certain non-syphilitic eruptions. The tendency of fully-developed syphilis in the human subject is to produce a new growth in the fibrous textures, or to give rise to a modification of the normal cell elements of these parts. The altered or new tissue we call "granulation tissue." Now, when syphilis modifies ordinary skin eruptions, it does so by impressing upon them more or less of the characteristic tissue change it ordinarily produces, and in doing so may antagonise to some extent diseased processes peculiar to the disease which it modifies. Eczema may illustrate what I mean. The characteristic of eczema is the occurrence of serous catarrh in the papillary layer of the skin as the primary condition; but if eczema occur in a syphilised subject, and the syphilis be active, then the tendency of the syphilis towards the formation of the granulation tissue may show itself, and the "serous effusion" may in part give place to the formation of new tissue—i.e., the two processes may be more or less intermingled, or rather, I should say, the result is a compromise. This is exactly what we should be led to expect from an examination of the naked-eye characters of eczema in a syphilitic subject. There is less discharge and more thickening than usual, and than we should be led to anticipate. So in psoriasis there is more thickening, less scaliness, and less vascularity, because the syphilitic tissue invades and presses upon the vessels in the normal tissue. Hence the effect of syphilis on ordinary skin diseases is to render them less typical, in regard to naked-eye characters and to their course, because the additional element of syphilis retards the cure, whilst there is the superaddition of the element of "thickening" or "deposit" (granulation tissue). Whenever I meet with a case of *unaccountable* chronicity I suspect that a syphilitic taint is in the back ground; and, for my own part, I believe that syphilis is a modifier of disease in local inflammations to a greater extent than has yet been expressed in any writings. Syphilis does not give evidence of its presence, as regards skin affections, until some strain is put upon the nutrition of the tissues, and then an explosion takes place. A strain is put upon the nutrition of the skin when a local inflammation occurs, its normal resistant power is lessened, and thereby syphilis, taking occasion by the weakness, shows itself in action as a modifier of the inflammatory process as described. A very familiar illustration of the fact that syphilitic complications or special development of latent syphilis in the system show themselves under such circumstances, is afforded by the outbreak of tubercular syphilis around a wound—about the shin, for example. What would be a simple wound in a healthy subject takes on unhealthy ulceration or syphilitic pustules, or tubercles develop about the seat of injury in subjects in whom syphilis is latent, but which had given no sign of its existence to the physician before. In like manner skin affections seem to excite latent syphilis at times into activity, and are thereby modified by it in the way I have indicated. I know of no more important point than this in cutaneous therapeutics. If we treat the syphilitic taint we shall much more speedily and certainly cure the disease which is present.

"Chronic inflammatory thickening" is a matter upon which a few words must be said. In some cases this condition is found to be developed out of proportion to the degree of antecedent hyperæmia both as regards its severity and its duration. My own belief is that in such cases it is to be explained by the existence of the strumous diathesis in the individual concerned, which often at once accounts for the infiltration of the fibro-cellular tissue with a low type of lymph, or the formation in it of a new tissue of a less perfect kind. At other times an old syphilitic taint may best explain the occurrence of thickening. At all events a mercurial course sometimes does wonders, as we all know. Of course long-continued hyperæmia in a person free from the two diathetic tendencies named will lead to "chronic inflammatory thickening." I am now particularly referring to cases in which thickening and induration either rapidly show themselves, or in such a manner as to strike us that it is due to some special tendency of the textures to hypertrophy rather than to the hyperæmia itself, which perhaps has been but slightly marked.

Ninthly. There is a class of phenomena connected with reflex action which it is of some moment to pay attention to in treating skin diseases. He who would deal with the matter scientifically must never concentrate his attention solely upon the mere local changes in these diseases, but must especially be on the alert to discover, in disturbance of the nervous system, the frequent reason of the intensification of hyperæmic conditions in the skin. I have seen not infrequently a redness of the skin produced by mental

excitement or sudden fright in "nervous subjects"; and there can be very few who have not known an eczema rubrum made immediately very much worse by the same influence. Depression and mental excitement play great parts in aggravating hyperæmic conditions of the skin. That uterine mischief occasionally intensifies acne rosacea, that dyspepsia frequently makes acne much worse, and the like, are facts belonging to the same category.

Tenthly. The hygienic surroundings of patients must always be carefully taken into account in the treatment of diseases of the skin, in reference especially to the class of cases particularly under consideration now. It is in this respect that the treatment of hospital and private patients of the better class differs so much. The confined living-rooms, the breathing of impure air, the defective diet, and the neglect of cleanliness, are influences that aggravate skin diseases in the poor as compared with the rich. It is cleanliness and feeding up, with fresh air, that the poor want, in many cases of disease which would be relieved by purgatives and alkalies and nervine tonics amongst the better classes.

Now the several modifying influences referred to under the foregoing heads may be present in different combinations, and it is the full recognition of this fact that leads to success in the treatment of skin disease.

CÆSAREAN OPERATION; RECOVERY.

By PHILIP FOSTER, M.D.

MRS. H. G——, a primipara, aged twenty-two, sent for me at 5 A.M. on the 17th March last, to attend her in her confinement. She had had pains at long intervals all night. Upon examination, the pelvis was found to be much deformed, and the os uteri out of reach. As the pains were very slight and infrequent, the patient, after recommending her to keep as quiet as possible, was left for the present. She was seen at noon, and again at 10 P.M.; when, the pains still remaining trifling, an opiate was prescribed, and she was left for the night.

March 18th.—10 A.M.: On calling this morning I learnt that she had passed a very good night, having been disturbed very little by the pains. I saw her again at 4 P.M., and made a careful examination of the pelvis: the extent of its conjugate diameter was barely an inch, and its lateral not more than two inches. The os uteri was still out of reach. At a consultation now held with my father and brother, it was decided that it was utterly impossible to deliver *per vias naturales*, and that nothing remained to give the patient a chance of life but the Cæsarean section. The peculiarities of the case and the extreme danger of the operation were fully explained to the patient and her friends, who requested us to do whatever we might consider best. I should observe that the liquor amnii had been escaping for two days, and that there was reason to believe the child dead, as it had not been felt to move for twenty-four hours.

Operation.—Assisted by my father and brother, I commenced the operation at 6 P.M. by an incision through the abdominal parietes in the usual direction. It was six or seven inches in length, and extended from about half an inch above and a little to the left of the umbilicus nearly down to the pubes. This was followed by a corresponding incision, about five inches long, through the walls of the uterus. In laying open the abdomen, the index and middle fingers of the left hand, as soon as the cavity was reached, were introduced and used as a director, and carried, one on each side, a little in advance of the knife while the incision was being prolonged. The child, dead as was anticipated, was now removed and separated, and the uterus immediately contracting firmly, the placenta was expelled through the wound, and required no effort to extract it. The hæmorrhage was very slight—not more than seven or eight ounces. After sponging away the blood from the abdominal cavity, the wound was closed by long stitches of the uninterrupted suture, care being taken not to include the peritoneum. The ligature used was stout silk. Broad strips of adhesive plaster were then applied crosswise, and over these were placed a thin flannel compress and broad binder. The intestines protruded through the upper part of the wound, and great care was necessary to avoid injuring them. My brother, by gentle manual pressure, kept them nicely out of the way. The whole proceeding occupied just a quarter of an hour, five minutes sufficing for making the incisions and extracting the child and placenta, the rest of the time being taken up in closing the external wound. The patient went through the ordeal well, only two or three half-suppressed moans escaping her during the operation. At its conclusion she expressed herself as feeling pretty well. Chloroform was not given, as it was thought that it might have a depressing effect, and interfere, perhaps, with the contraction of the uterus. She was ordered two grains of opium immediately, and not to take anything except a little tea, milk, with brandy-and-water at discretion. At 10 P.M. the patient said she felt nicely and had very little pain. Tongue clean and moist; but the pulse rather quick, 100; countenance good, and the temperature of the body not increased.

March 19th.—11 A.M.: Pain and tenderness upon pressure all over the abdomen, but especially on the left side; not much constitutional disturbance, the tongue being clean and moist, pulse 100, and the temperature of the skin but very little increased. Ordered a mustard plaster to the side, and to take a pill consisting of half a grain of opium and half a grain of calomel every hour.—4 P.M.: No improvement. Six leeches to be applied to the side, and the pill to be continued.—7 P.M.: Abdomen has become tympanitic, and is still tender; pulse 110, weaker; no fæcal evacuation, but flatus passes per anum; urine flows freely, partly, but not entirely, involuntarily; countenance good, and temperature natural. To have half a glass of sherry and one pill every two hours.

20th.—10 A.M.: Has passed a comfortable night, having had two hours' sleep at a time; tongue clean, and no sickness; in other respects the same. Pills and wine to be continued.—7 P.M.: Much the same.

21st.—10 A.M.: Going on much the same. Having had no evacuation from the bowels, a castor-oil enema was ordered.—7 P.M.: General symptoms much the same. The injection prescribed in the morning returned almost immediately without any fæces, but the bowels acted spontaneously in the afternoon. Treatment to be persevered in.

22nd.—10 A.M.: Has passed a very restless night, having been troubled with incessant retching and vomiting, but not much pain. There is slight passive bronchitis. The pills and wine to be discontinued, and brandy-and-water taken *ad libitum*. To have five grains of subnitrate of bismuth immediately, and to repeat it after every attack of vomiting.—4 P.M.: Vomiting entirely ceased after second dose of bismuth; pulse ranges between 116 and 120; countenance and spirits good. To take tea and milk, and continue the brandy-and-water.

23rd.—10 A.M.: Has passed a good night, and had no return of the vomiting; the bronchial complication has entirely disappeared; no fever, but the tongue exhibits a slight dyspeptic fur; has had four motions, natural in appearance and not relaxed.—6 P.M.: Has had a comfortable day, but complains now of slight spasmodic pain in the epigastrium. Ordered a sinapism, and half a grain of opium immediately, to be repeated at bedtime. Takes tea and milk, which she enjoys, and brandy-and-water occasionally.

24th.—11 A.M.: Has had a good night, and there is an amelioration this morning in all the symptoms; expresses herself as feeling much better; abdominal tenderness and tympanites considerably less; pain in the epigastrium gone, but there is a slight uneasiness in the course of the ascending colon. Ordered a sinapism, and to take half a grain of opium three times a day. The lochia have flowed freely, per vaginam, from the commencement, have been natural both in appearance and quantity, and perfectly free from all offensive smell.—8 P.M.: Has vomited once during the afternoon, but remains in other respects the same. To go on as before.

25th.—4 P.M.: Rested very well last night, and has slept most of to-day; tongue clean and skin healthy; the pulse, however, is quicker and more feeble; passes flatus freely, but has had no alvine evacuation since the 23rd.—11 P.M.: Worse; pulse 130, very feeble but distinct; tongue clean, but preternaturally red. The vomiting has returned, and a constant feeling of sickness is present. Respiration good,

and temperature not increased. All food *by the mouth*, both solid and liquid, interdicted, and ordered an injection, consisting of an ounce of brandy, two of gruel made with arrowroot, and ten minims of tincture of opium every two hours.

26th.—11 A.M.: Has had a restless night; pulse 118, feeble; tongue still morbidly red and slightly aphthous; nausea continues. The abdominal wound has healed by the first intention, except about two inches of the lower portion, the edges of which are assuming a gangrenous appearance. Carbolic acid lotion to be applied, and the injections to be continued.—10 P.M.: Little or no change since morning, excepting that there is less feeling of sickness; pulse 120, feeble. Thinks she could take a little spirit and water, and as she prefers gin, ordered a tablespoonful every hour. Injections and lotion to be continued.

27th.—11 A.M.: Better; pulse 120, firmer; tongue more healthy, the aphthæ and morbid redness having nearly gone; no nausea; has relished half a slice of toast and a cup of tea, and takes milk and arrowroot freely. Complains of occasional pain in the abdomen, but there is no tenderness on pressure, except in the neighbourhood of the wound. The tympanitic swelling, too, is gone. The gin and milk to be continued, and also the injections, with the addition of two ounces of beef-tea to each.

28th.—Still improving; pulse 110, stronger. Takes toast, beef-tea, and milk freely. Wound going on favourably. To take the gin discretionally. The injections to be discontinued.

29th.—The improvement continues. To go on as before.

30th.—Still continues to amend; pulse 100; no pain. Has had a small mutton-chop for dinner. The slough, which was very superficial at the edges of the wound, has separated, leaving the parts beneath florid and healthy-looking. To have one grain of quinine three times a day.

April 1st.—Makes steady progress. In addition to her toast and tea or coffee, has an egg for breakfast, and a mutton-chop for dinner. Can get out of and into bed without assistance.

5th.—Much stronger. Takes any kind of food without restraint. Wound was drawn together to-day with strips of adhesive plaster.

14th.—Gone on quite favourably since last report, and sat up about an hour yesterday. Wound nearly healed.

24th.—Still improving. Eats and sleeps well, and sits up two or three hours every day. Bowels on the whole act well, but require an occasional enema.

May 9th.—Has come down into the sitting-room every day since the 1st, and remains there the greater part of the day, employing herself in light work, as sewing, knitting, &c. She has no pain whatever, and says that she feels quite well. The menses have not appeared since the operation, but a week or ten days ago she had all those indefinable feelings which usually precede the catamenial discharge.

The patient would have been well a month since if the whole of the abdominal wound had healed by the first intention.

Remarks. — The successful result of this case was owing, in the first place, to the *early performance* of the operation, before the strength of the patient had become impaired by the long continuance of useless pains; secondly, to the free use of opium, which I am convinced was of essential service, by tranquillising the nervous system, checking inflammatory action, and procuring sleep; and also to the timely resort to stimulants and sustaining treatment.

As is well known, the mortality of this frightful operation, happily rarely required, is very great. According to the statistics of Dr. Ramsbotham, it had been performed in this country, up to 1856, fifty-one times, and on forty-seven occasions was fatal. Since then nine additional cases have come to my knowledge, of which two were successful,* making six recoveries out of a total of sixty, my own patient making sixty-one, and furnishing—as far as I can understand, and limiting the observation to Great Britain—only the seventh instance of recovery on record. Dr. Robert Lee says that, besides these, a great number of cases ending fatally have not been recorded. I can readily believe this, as instances of it have come under my own observation. Although the results of operative procedure are thus shown to be so terribly unfavourable, still to leave the patient to nature, delivery being impossible by the natural passages, is to leave her to die. There is no evading, therefore, the responsibility of the operation; and, if but one case in a thousand were successful, it would still be an imperative duty to urge and undertake it. I feel that the importance of *operating early* cannot be too strongly insisted upon; and I beg most urgently to advise any gentleman into whose hands a case of this kind may fall not to allow the desperate nature of the operation to deter him from commencing it until the patient becomes exhausted, and her chance of recovery thereby materially lessened. I consider the continuous preferable to the interrupted suture, in these cases, as by keeping the edges in closer apposition it is more likely to secure union by the first intention, and because the protrusion and strangulation of the abdominal contents between the stitches, which is apt to occur when the latter is used (*vide* Dr. Thornton's case), is not possible. Mrs. H. G—— was weak and rickety in infancy, and was eight years old before she walked. The pelvic deformity was caused by an extreme projection of the promontory of the sacrum.

Leeds, May 18th, 1872.

* Dr. Thornton's case in THE LANCET, 1857; and case in Transactions of the London Obstetrical Society for 1867.

ON

THE OCCASIONAL INSUSCEPTIBILITY OF INFANTS TO THE CONTAGION OF SMALL-POX.

BY W. N. THURSFIELD, M.D.,

SURGEON TO THE WELLINGTON (SALOP) DISPENSARY.

THE comparative degree in which infants and adults are susceptible to certain kinds of infection is a subject about which it is easy to speculate but difficult to obtain facts that will not admit of some other explanation. The town of Wellington has recently suffered from an epidemic of small-pox, and on several occasions I have been struck with the apparent immunity of young infants who had been exposed to the contagion before being vaccinated.

On the 25th of March of this year I was sent for to see a Mrs. W——, a lady I had attended in her confinement five months previously, and whose child had not been vaccinated in consequence of the express prohibition of both parents. I found the lady suffering from a severe attack of small-pox; the eruption, which was said to have appeared four days previously, was then in the pustular stage. She had not discontinued nursing the infant, and it was taking the breast at the time of my visit. The child was at once removed from the mother, but not from the house, where it remained throughout. Before Mrs. W—— could be said to have completely recovered, she, in spite of remonstrance, resumed suckling the child, and continued to do so for some time. At the present date (May 20th) the child is quite well, and has had no eruption or feverish symptoms whatever, and is still unvaccinated. This lady's husband contracted small-pox during his wife's illness; both had been vaccinated in infancy, and both recovered.

In another case, a young man, lodging in a house near to where small-pox had been for some time, was taken with a moderately severe attack of the disease, and came under my care as a dispensary patient on Good Friday last. The old woman of the house, who nursed and looked after the patient, was bringing up by hand an illegitimate infant, then ten weeks old, which had been put out to nurse with her. This infant had not been vaccinated; and, though in constant contact with the nurse, and sleeping with her in the room next to the small-pox patient, did not take the disease, and, through the neglect of the woman to take it to the public vaccinator, it remained unvaccinated. About five weeks after the recovery of the young man, the nurse-child died of general debility. I kept it under my observation until its death, and know that it had not small-pox.

In both these cases there certainly was no error in diagnosis, nor was either of the infants vaccinated or out of my personal observation at any time.

Wellington, Shropshire, May 20th, 1872.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

KING'S COLLEGE HOSPITAL.

AMPUTATION OF THE THIGH FOR DISEASE OF THE KNEE-JOINT.

(Under the care of Mr. HENRY SMITH.)

IT is such a rare thing to witness an amputation of the thigh for disease in the joint alone at this hospital that we record the following case, which presented certain exceptional features that, in the opinion of Mr. Smith, precluded any other operation.

The patient was a young man aged twenty, who had suffered more or less from disease of the knee for three years, and had been under various treatment in hospitals and elsewhere, sometimes improving and then retrograding. He was admitted into King's College Hospital in March, at which time there was considerable tumefaction of the knee and wasting of the thigh; there was severe pain on pressure over the patella and the external parts of the joint; frequent painful startings of the limb occurred at night; and the patient was much reduced in general health. Mr. Smith ordered local and general treatment, with the hope that anchylosis might occur; but, the symptoms continuing, it was resolved that excision of the knee should be performed. A very careful examination of the patient, however, was instituted, and it was ascertained that the urine contained a large quantity of albumen. Under these circumstances the operation was deferred, with the hope that the quantity of albumen might diminish; but no material change occurred in that respect, and amputation was determined upon and performed, the ordinary flap operation being executed. On examining the joint, it was found to be in progress of entire disorganisation, the cavity being filled with purulent matter, the cartilages ulcerated, and the synovial membrane degenerated.

Mr. Henry Smith, in his remarks, stated that his pupils would be surprised to see an amputation of the thigh performed for disease of the knee-joint alone in a young man, and, in fact, he had had a great struggle to bring his mind to perform this operation; but with the evidence they possessed of the presence of degeneration of the kidney, he considered it would be highly imprudent to perform excision of the knee-joint. For although he believed the shock of the two operations was about equal, there could be no doubt that in the long run there was a greater call upon the constitutional powers after excision. He had been educated in the principle that amputation of the thigh should not be adopted for disease of the knee-joint alone; but there were exceptions to this rule, and the case before them presented one of these exceptions. Much as he regretted having had to adopt the step, he was firmly convinced that he had done wisely in rejecting excision, whatever the result might be.

REMOVAL OF SCIRRHOUS BREAST.

The patient was under the care of Mr. Henry Smith. She had presented all the usual signs of scirrhous disease of the breast; but on the operating-table a thin fluid was observed oozing from the nipple, which is not usually seen in this disease, but is common in cystic disease of the breast. After removal, the tumour on section showed a good specimen of scirrhus. This case, Mr. Smith observed, was a very favourable one for operation. No glands were implicated, and the skin over the tumour was not adherent. The more he saw of this class of cases the less eager was he to operate; for if the disease is at all far advanced, all efforts to preserve life are nugatory. He refuses to operate in more than fifty per cent. of the cases which come under his observation, as the patients do not come early enough. However, in this case, he hoped both to relieve the patient from her present anxiety and pain and to prolong her life.

HARE-LIP.

After the operation, Mr. Smith showed a child on whom he had operated some weeks ago for hare-lip. The child had also a cleft palate. This was a very bad case. The child had been operated upon before in the country; but, owing either to some failure in the after-treatment or the crying &c. of the child, the edges of the wound had not adhered. Those who saw him perform the operation would remember that he expressed his fears that the result might not be good; for he had to pare away a great deal, and also had to detach the cheek almost as high as the orbit, so as to bring the pared edges together. After the operation a spring cheek compressor was put on. The child, as they saw, had done well, and the result was extremely good.

LIGATURE OF THE SUBCLAVIAN.

Sir W. FERGUSSON ligatured the subclavian for aneurism of the third part of the artery. The patient, a man about forty years of age, had noticed a pulsating swelling at the root of the neck, on the left side, since Christmas. He had been under treatment, and was at last sent to the hospital. The tumour was near the mesial line, and it was difficult to decide, before operating, where the artery should be tied. An incision was made along the clavicle, and then others above and below at right angles to it. After a long and careful dissection the aneurismal tumour was come upon, overlapping the anterior scalenus muscle. It was pushed outwards and downwards and then the scalenus was seen; there was then some delay in making out the artery; at last it was seen on the outer margin of the muscle, and was ligatured there. Sir William Fergusson said this was the fourth time he had ligatured the subclavian; the first time more than forty years ago. The operation was a troublesome affair, as most of them are. A curious thing was noticed towards the end of the operation—a white serous fluid was seen at the bottom of the wound, and probably the thoracic duct was injured; yet it might not be so, as the subclavian was not seen, and he did not think he was near the angle where the duct joins the vein. The danger in operating on the left side is always greater on account of the duct.

ST. MARY'S HOSPITAL.

FRACTURE OF THE HUMERUS, WITH LACERATION OF THE BRACHIAL ARTERY; MORTIFICATION OF THE LIMB; AMPUTATION AT THE SHOULDER-JOINT; RECOVERY.

(Under the care of Mr. JAMES LANE.)

THE following case is worthy of record as an example of the not very common occurrence of laceration of the main artery of a limb, associated with a simple fracture.

On Dec. 12th, 1871, C. E——, aged thirty-nine, drayman, was thrown from his cart, the wheel of which passed over his right arm. He applied at the hospital, and the humerus was found to be broken at about its middle; but as nothing unusual was then observed splints were applied and he was sent home. The next morning he came to the hospital in great pain; the splints were removed, and the arm was found to be greatly swollen, tense, and discoloured, evidently from an enormous ecchymosis; the forearm and hand were œdematous and cold, the pulse could not be felt at the wrist, and the fingers were numb. He was immediately admitted, and placed in bed; the limb was supported on a pillow with the forearm and hand enveloped in cotton-wool, while cold lotion was applied to the arm with a view to check, if possible, further effusion.

For the first two or three days it was hoped that the limb might be saved, for the swelling seemed somewhat less, the hand was not so cold, there was more sensation in the fingers, and the constitutional disturbance was trifling. These favourable signs, however, did not continue: large bullæ formed all along the limb; the forearm and hand, which at first were simply œdematous and slightly reddened, became dark-coloured and evidently gangrenous, emitting a very fetid odour; and on the 21st it was obvious that amputation could no longer be safely delayed, especially as there was now considerable constitutional irritation, his pulse being 120, and his temperature 103°.

Operation (Dec. 21st).—The swelling extended as high as the lower border of the axilla, where it ceased somewhat

abruptly, and the skin showed signs of mortification up to the same level. It was clear, therefore, that nothing short of amputation at the shoulder-joint would suffice. This was accordingly done by the "oval" incisions, commencing opposite the acromion and diverging to the anterior and posterior margins of the axilla. Anterior and posterior flaps were dissected back, and, the capsule being exposed, the joint was cut through from above; the operation being completed by the division of the vessels, nerves, and integuments in the axilla. The artery was not compressed above the clavicle, but was grasped from the wound by Mr. Owen before it was cut through, bleeding from this source being thus effectually prevented.

The subsequent progress of the case was satisfactory. Union of the upper half of the wound took place by first intention, and, with the exception of some suppuration at the lower part, and a small abscess over the scapula, which required incision, nothing worth noting occurred to interfere with his recovery. He left the hospital Feb. 2nd, 1872, in good health and condition, with the wound soundly healed.

On examining the limb after removal, a large mass of putrid coagulum was found on the inner side of the arm, but the whole of the tissues from the axilla to the bend of the elbow were infiltrated with blood, and were in a state of gangrenous disorganisation. The humerus was fractured obliquely downwards and forwards at its middle, and the sharp end of the upper fragment had torn the brachial artery completely across. The median nerve, however, had escaped injury. The hand and forearm were also gangrenous throughout, but the swelling of these parts, which was very great, depended entirely on serous infiltration. The effusion of blood did not extend below the elbow. The incisions made for the amputation only just cleared the gangrenous parts.

CENTRAL LONDON SICK ASYLUM.

CEREBRO-SPINAL MENINGITIS WITH MYELITIS OF THE CORD.

(Under the care of Dr. STRETCH DOWSE.)

H. Q——, aged sixty, a well-nourished, corpulent woman, was admitted into the Highgate Infirmary on Dec. 11th, 1871. Her condition was such that it was with some difficulty she was able to state that two months previous to her admission, whilst sitting in a chair, she was suddenly seized with a transitory want of consciousness, accompanied with loss of speech, but for some time prior to this she had suffered from attacks of giddiness, and was for the most part heavy and drowsy. A fortnight after this attack she experienced a feeling of numbness in the left hand and arm, which was succeeded by almost total loss of power in this extremity. There was likewise a feeling of heaviness, formication, and twitching about the lower limbs, with occasional severe aching and stinging pain about the dorso-lumbar spine.

Upon admission she walked when supported with a difficult and faltering gait, dragging the lower limbs after her; the speech was thick, but not aphasic; the intellect was complete but dull; the memory decidedly imperfect; there was entire motor paralysis of the left hand and arm, with intensified hyperæsthesia; there was considerable impairment of motor power in the lower limbs, with general anæsthesia extending as high as the umbilicus. The bowels were obstinately confined, and there was involuntary dribbling of urine from the bladder. The sight was good; both pupils were dilated, but the left more so than the right; there was increased lachrymation from the left eye. The skin was acting freely, the secretion having the acid smell of acute rheumatism, and the joints were for the most part painful. The urine was high-coloured and loaded with urates, but free from albumen. She complained of great pain over the head and along the spine. There was great tenderness manifested over nearly all the vertebræ, but most marked from the eighth to the twelfth dorsal. Her temperature was 101½°; pulse 90, full; respiration 21. She continued in this state for some days with little variation, save that she became more drowsy, and the intellect duller.

On the 16th Dr. Dowse was called to see her, and found the breathing stertorous, the face flushed, the head extremely hot, with all the symptoms of approaching coma; almost entirely insensible to external impressions; but, strange to say, she would carry on a rambling conversation with an unfortunate patient in a bed close by who was suffering from the delirium of cerebral exhaustion. Attention was at once directed to the bladder, which was greatly distended with urine, giving rise to suppression and uræmic poisoning. Immediately after the bladder was emptied she became quite calm and rational. On the day following the lower limbs were completely powerless, and equally as anæsthetic, the latter condition existing as high as the axillæ; the left upper extremity remained in the same state as before described, the right quite normal. Her temperature varied little, and never exceeded 102° F. In a few days the right arm became gradually numb, commencing at the shoulder, and gradually extending downwards towards the fingers. Little change occurred after this until the 23rd, when the whole of the body was completely devoid of sensation and motion. She lay upon her back like a log, breathing stertorously with a prolonged expiratory whiff. The urine was ammoniacal and highly offensive; the lips, head, and face congested and cyanotic. In this condition she expired.

Autopsy, twenty four hours after death.— No cadaveric rigidity; body fat and well-nourished. The skull-cap having been removed, the dura mater was found to be natural, save that the vessels were engorged with venous blood. The arachnoid was raised above the cerebral convolutions by serous fluid; it presented a semi-opaque translucent appearance, and it bound firmly down by adhesive inflammation the cerebral lobes at their proximate extremities. The pia mater was adherent to the arachnoid in places by fine semi-transparent fibrous bands. The substance of the cerebrum, cerebellum, and pons appeared quite healthy. The lateral ventricles were full of fluid. The base of the brain was healthy, and in this situation the arachnoid membrane was free from any apparent inflammatory action. The arteries had undergone atheromatous change, and the carotids were open and gaping. The spinal cord revealed, after the dura mater had been slit up, hypervascularity almost throughout its entire length. The arachnoid membrane was found to be bound down to the anterior columns in several places by firmly organised adhesions. The vessels of the pia mater were beautifully mapped out to their most minute ramifications, and could be raised upon the point of the scalpel readily. This congested condition of the pia mater was most marked in the cervical and lumbar regions, where it dipped over the antero-lateral depression and between the lateral and posterior columns. Many of the nerve-bundles, both anterior and posterior, were of a bright pinkish-red colour, which extended throughout their entire substance, as far as their exit through the intervertebral foramina. This condition did not pertain to all the nerve-trunks; it was, however, more distinct in the large trunks going to form the cervico-brachial plexuses, and in the lumbo-sacral roots, extending to those forming the cauda equina. The substance of the cord presented a pinkish-grey colour, and in those portions whence the above-mentioned nerve-trunks emanated it was much softer than elsewhere. No microscopical examination was made.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MAY 7TH, 1872.

MR. JOHN HILTON, F.R.S., PRESIDENT, IN THE CHAIR.

REPORTS were read from the Morbid Growths Committee on Mr. Cooper Forster's case of Tumour of the Breast, Mr. Clark's case of Melanosis, and Mr. Rivington's case of Sanguineous Tumour from the Axilla.

DR. SANDERSON then delivered an address—

ON PYÆMIA.

He began by relating his first experiments as to the effect of inoculating the lower animals with pyæmic liquids. In the autumn of 1867 he had injected the purulent liquid contained in the ankle-joint of a patient who had died a few hours before with metastatic abscesses, general suppu-

rative arthritis, and intense septicæmia, under the skin in three animals, a dog and two guinea-pigs. The two guinea-pigs died within short periods (fifteen and twenty days), and exhibited symptoms of great intensity. Both had metastatic abscesses, but in one of them the lungs were already beset with minute nodules resembling miliary tubercles. The dog lived seven weeks. In this case there were no secondary abscesses, but miliary tubercles of the liver and spleen. From one of the guinea-pigs two others were inoculated, of which one died of pyæmic, subcutaneous abscesses without visceral disease; the other, which lived longer, had no abscesses, but tuberculous disease of the lungs. During the same winter other experiments of the same kind were made, all of which seemed to show that by the inoculation of pyæmic products two sets of lesions might be produced—as an immediate result, metastatic abscesses accompanied by a general typhoid state, which was often fatal; as an ulterior result, either disseminated nodules, at first hard but afterwards becoming caseous at their centres, or interstitial induration—both forms of lesion having their seat chiefly in the lungs, spleen, and liver, but also occurring in other viscera.

Having stated these facts, which he said had even in 1868 led him to regard it as probable that the two forms of infective lesions—the tuberculous and the pyæmic—were connected together etiologically and genetically, he referred to another fact which resulted from experiments made in 1871, as to the existence of bacteria in animal liquids, and the circumstances which determine their occurrence. These experiments had shown that whereas bacteria could not be shown to be present either actually or in germ in the healthy liquids or tissues, or in the products of healthy inflammation, they were present potentially in pyæmic liquids—that is to say, that whereas ordinary pus could be kept for days or even weeks free from bacteria, provided the precautions against "spontaneous generation" were observed, pyæmic pus cannot be so kept, and moreover possesses the property of at once determining the development of bacteria in any suitable liquid to which it is added. At that time he had concluded, from insufficient observation, as he now knows, that pyæmic pus did not itself contain visible bacteria.

A short account was next given of certain researches made during last summer in association with Dr. Klein as to the channels by which infective poisons are distributed from their centres of origin. Referring to the last occasion on which he had brought the subject of the intimate pathology of tubercle before the Society, and to the doctrine he had then advocated that tuberculosis is an irritative overgrowth of a pre-existing tissue, he said it had then been shown that the process, whether in its disseminated or interstitial form, has its seat in a certain tissue, and this tissue had been termed adenoid or lymphatic, both words implying its intimate and special relation with the lymphatic system; but the precise anatomical nature of this relation had been imperfectly made out. No further progress was made till last May, when Dr. Klein came to England with the distinct object before him of co-operating in the investigation of this very question. The field taken up was the peritoneum—the reason of the choice being that that membrane, and especially the omentum and diaphragm, had already been the subject of investigation as favourite seats of tuberculosis. These researches have not merely served to elucidate one or two anatomical facts of very great importance to the pathologist—*e.g.*, the existence of a lymphatic system in the omentum, and its distribution, and the mode in which the peritoneum communicates with the lymphatic system—but have rendered it possible to give an account which, so far as the peritoneum is concerned, is tolerably exact and complete, both of the normal process of absorption and of the changes which the absorbing tissues undergo when they are entered by infective agents.

In the course of these experiments it was found that not only as regards the property of any given peritonitis to assume the infective character, but as regards the intensity of the infective results and their duration, there were endless varieties. In one set of cases the secondary lesions were suppurative, the constitutional disturbance intense, and the fatal result rapid; in another the lesions were vascular new growths, firm at first, afterwards becoming caseous, the progress slow and the functional disturbance imperceptible. And then it appeared that in all those instances in which the pyæmia—that is, the acute character—manifested itself bacteria were present, not merely in the purulent liquids but in the blood. Under these circumstances attention was directed from the effects to the poison itself. Soon after the opening of the Brown Institution, it was found that the practice of the hospital for animals was likely to afford the required material—in short, that pyæmia occurred in dogs under circumstances very similar to those which determine it in human beings, and exhibited similar symptomatical and pathological aspects. A series of experiments were therefore commenced in January last, having for their object to acquire a knowledge of the morbid poison, and particularly to discover by what conditions the variations of its intensity were governed. With reference to these experiments Dr. Sanderson would not anticipate the complete account of them in the report of the Medical Officer of the Privy Council, but would confine himself to giving an account of one series, and exhibiting the action of the pyæmic poison during life, and the post-mortem appearances. But before doing so he would state shortly what he understood to be the signification of the term "pyæmia." He then proceeded to say: "The word pyæmia is apt to be used in somewhat different senses, according as the person using it has before him the medical or surgical aspect of the disease. To define it completely we must, I think, take into account its mode of origin, its symptoms, and the anatomical changes which it produces, not confining our attention to either of these to the exclusion of the rest. With this consideration in view I would comprehend in my definition the following propositions:—

"1. Pyæmia originates by the introduction into the living tissues, and eventually into the blood, of a poison which is itself a product of inflammation. 2. The action of the poison manifests itself in an alteration of the blood, and in disorder of the vital functions. The former of these is characterised by the presence of bacteria, and by change in the optical characters of the blood, which often becomes obviously more transparent and darker by reflected light than it is naturally. Of the latter—viz., the general disorders of the vital functions—the most prominent phenomenon is fever, which in the more intense forms of the affection is followed by collapse, which culminates in death. 3. More remotely the disease manifests itself in secondary suppurations—i.e., in the formation of metastatic abscesses,—which may occur either in the internal organs or underneath the skin. The special characters of these metastatic (as I am in the habit of calling them) infective abscesses are those which are well known both to surgeons and physicians. They have the additional less-known character, that the pus they contain is full of bacteria. 4. Pyæmia differs from tuberculosis in the rapidity of its progress, and in the obvious character of the anatomical changes of which it consists. Whereas by tuberculosis we are understood to mean anatomically the overgrowth of cells in certain tissues which we designate lymphatic on account of their proved anatomical relation to the lymphatic system, the secondary inflammations of pyæmia result in the formation of infective abscesses. 5. Pyæmia resembles tuberculosis in its mode of origin. Both spring from inflammations, and, so far as relates to the anatomical characters of the lesions, both are inflammations. To both, therefore, the term secondary or infective inflammation is applicable.

"So much for the disease itself. Let me now," said Dr. Sanderson, "draw your attention to the nature of the poison. I wish to show, first, that every pyæmic abscess contains a poison, which, when introduced either into the circulation or into a serous cavity, produces the symptoms of pyæmia; and secondly, that we have this poison so entirely in our possession, and so far under control, that, beginning with an agent so mild in its action that it produces no marked symptoms, we can convert it into an agent of such intensity that it kills in two or three hours with the formidable symptoms seen in the case we have now before us. This intensification is effected by a process which may be called cultivation. Dr. Klein made the important discovery, that if a pyæmic liquid was transferred to the peritoneum of a guinea-pig, and allowed to remain there for a couple of days, although it did not at first produce any intense symptoms in the animal itself, its toxic intensity increased in such a degree that when the transudation liquid produced in this way was injected to another animal it had acquired the most deadly activity; and that all such ex-

tremely active liquids were crowded with bacteria of a particular character, the increased number of which seemed to be in proportion to their toxic properties."

Dr. Sanderson then proceeded to exhibit a dog, into the abdominal cavity of which six drops of a pyæmic transudation liquid had been injected three hours before. The animal was in a state of profound collapse, accompanied with vomiting, purging, and cramps of the extremities. Shortly afterwards the animal was killed, and the abdominal cavity opened. The peritoneum contained liquid slightly stained with blood, which on microscopical examination was found to be crowded with bacteria. The intestines were distended with a frothy liquid that possessed none of the characters of the natural contents which had been found in other cases to be charged with shed epithelium. The internal surface of the whole of the alimentary canal, from the stomach downwards, was intensely injected, and presented appearances which (as had been found by more careful investigation in previous cases) were due to the separation of the epithelium from the surface of the mucosa, and the infiltration of that tissue with liquid.

The material which obtained these results was obtained as follows:—Pus from a pyæmic abscess of spontaneous (i.e., accidental) origin was introduced into the peritoneal cavity of a guinea-pig, and allowed to remain there for two days. It was then withdrawn from the guinea-pig, and some of it at once injected into the peritoneum of a dog. The dog was affected in exactly the same way as the animal exhibited to the Society. The remainder of the liquid was kept for five weeks in hermetically sealed tubes, after which six drops were injected into the peritoneum of a guinea-pig, which showed its action to have become relatively feeble. After two days the transudation liquid produced was (the day before) tested with a third guinea-pig, and found to be extremely active. This afternoon it was injected into the peritoneum of the dog exhibited.

Dr. Sanderson then concluded by saying: "Such are the facts. The all-important question remains, Do these experiments concern us as physicians and surgeons, or not? I think they do. But what I want is to prove it; for I am well aware that unless clinical observation comes in aid of pathological experiment, the results of the latter do not tell practically. Let me state what are the lines of inquiry I desire to see taken up. The first question is—Do the characters which we have shown to be present in the products of acute secondary inflammation in the lower animals also exist in similar products in man? The second is more important still—Can it be shown that human pyæmic products, when tested by inoculation, possess exactly the same morbific properties as those which are possessed by the liquids to which our experiments relate? It is for these inquiries that I earnestly ask the assistance of hospital surgeons.

"Finally, I would say a word as to the limits of the question now before us. With regard particularly to the question of bacteria, I desire to keep to the bare facts of disease, and not to diverge into discussions as to their origin. It is a matter to me of comparative indifference how they originate. Our observations lead us to conclude—first, that they afford a *characteristic* by which we may distinguish the products of infective inflammations from those which are not infective, and that their number affords an indication of the degree of infectiveness; and, secondly, that their presence in the blood is an indication of that constitutional disturbance which accompanies infective inflammation, not merely when that disturbance assumes the degree of intensity of which we have an example before us, but in the slighter form of irritative fever. If these facts prove to be true, not only in the lower animals, but in man, their importance is quite unaffected by any theory we may entertain as to the origin of bacteria."

The PRESIDENT said the subject was one of great importance. Though it might not be possible to assent to all that Dr. Sanderson had said, yet the experiments were most interesting. The effect produced upon the dog by the injection of five or six drops of the peritoneal fluid was very remarkable.

Dr. CRISP said he differed from Dr. Sanderson in several of his conclusions. He saw little or no resemblance between pyæmia and tuberculosis; one was highly infectious, and the other not communicable. There was a great difference between tubercle in man and that in the lower animals. Pyæmia in the lower animals was of rare occurrence. He did not think bacteria were the cause of pyæmia, they were found in many diseases of the lower animals; also, as he had first pointed out in splenic apoplexy, they were probably the effect. He thought the irritating matter used by Dr. Sanderson acted more like a poison, such as prussic acid, &c., causing death in a definite time.

Dr. BASTIAN said the facts brought forward by Dr. Sanderson were most important. With the exception of one or two rare diseases, there was no case on record where bacteria were found in the blood of man during life. Did Dr. Sanderson see in the blood of pyæmic animals well-formed bacteria, or only granules? Then what relation did bacteria bear to pyæmia? Were they to be considered as the cause or the consequence? Again, admitting that bacteria exist in the blood in pyæmia, and are the cause of it, how did the contact of bacteria incite the pyæmic process? Bacteria were constantly in contact with open wounds and mucous membranes; they were to be found in the mouth and back of the throat of every individual. If they were the cause of pyæmia, how was it any lived? Then fluids containing bacteria had been injected into animals, and no disease had resulted; he had often done so with frogs. It was rare to find bacteria in the blood of patients dying of typhoid fever or acute rheumatism, yet in both these diseases where the temperature had been high they had been found a few hours after death. Why were bacteria found in these cases? If bacteria were essential to pyæmia, how was infection brought about?

Mr. HULKE asked if Dr. Sanderson used the terms "pyæmia" and "septicæmia" as synonymous. He would draw a wide distinction. He considered pyæmia the result of the introduction of pus into the vessels; septicæmia, of some putrescent matter. He thought the dog on the table died of septicæmia, not pyæmia. If perfectly filtered healthy pus were injected into an animal, the symptoms of pyæmia simply resulted; if unfiltered, the same symptoms *plus* multiple abscesses, &c.—i.e., septicæmia.

Mr. SPENCER WELLS asked if a physiological poison was always the cause. Might it not be a chemical one? He mentioned a case in which the peritoneal fluid was taken, and an alkaloid prepared, one milligramme of which killed a rabbit. The rabbit had effusion into the peritoneal cavity. Some of this was taken and injected into a second rabbit, which died; and fluid from a second killed a third; and fluid from the third killed a fourth; but the fifth recovered. This was a chemical poison, and no bacteria were there.

Dr. C. J. B. WILLIAMS said that, from the statements made, he could come to no conclusion whether bacteria were a cause or a consequence. He thought many poisons were developed in disease as the result of decomposition.

Dr. MURCHISON asked if pyæmia could originate in the body independently of poison from without. He had often examined the bodies of patients dying of pyæmia after typhus fever, on whom there had been no bedsores or any ulcerated surface, yet evidence existed of intense pyæmia—pus in joints, under the skin, and abscesses in internal organs. Some epidemics of typhus were characterised by sequence of pyæmia, and when one case had occurred a number followed, perhaps from bad hygiene.

Mr. HENRY LEE thought Dr. Sanderson had shown that the products from simple inflammation differed from those originating from a putrid element; the latter was much more fatal than an inflammation spontaneously originating.

Dr. ANSTIE said he had met cases of pyæmia arising without external wound, and apparently without the introduction of any putrid element. One class of cases was the result of cold, no other cause being assignable; a second class where there had been exposure to bad smells, drains, &c. Of this latter he mentioned a case which he had seen at the Westminster Hospital.

Dr. CAYLEY asked what became of the animal into whose peritoneal cavity the pus had been injected and remained for forty-eight hours? Could the fluid removed be the same as that injected?

Mr. HULKE said that a chemical substance—septicin—had been long ago separated from purulent fluids by German chemists.

Dr. SANDERSON shortly replied that, as regarded bacteria in general, he was well aware, from his own experiments, that the ordinary bacteria of putrefaction possessed no

toxic action; that fluids containing them could be injected into the circulation of animals without result. As regarded the bacteria of pyæmic products, he had carefully guarded against the inference that they were the efficient cause of pyæmia. He regarded them as characteristic inhabitants of infective fluids, and therefore probably the carriers of infection. As respected the term "septicæmia," he understood it to mean a state of the blood which was only present in the most intense forms of pyæmia. He quite agreed with Mr. Hulke in regarding metastatic abscesses as an accident rather than an essential of pyæmic infection. The theory that the poison was of the nature of an alkaloid was set aside by experiments on the diffusibility of the pyæmic poison; it cannot be diffused.

A vote of thanks was given to Dr. Sanderson for his observations.

Reviews and Notices of Books.

The Origin of Cancer. Considered with reference to the Treatment of the disease. Reprinted from THE LANCET. By CAMPBELL DE MORGAN, F.R.S. pp. 87. London: J. & A. Churchill. 1872.—Whether cancer be of local or constitutional origin is a question which has divided the profession for half a century, and the views of Mr. De Morgan on so interesting a subject cannot fail to have the greatest weight, not only on account of his well-known ability as a surgeon and as a pathologist, but from the advantages that his long connexion with the cancer wards of Middlesex Hospital has given him in the observation of the disease in all its forms. In these papers Mr. De Morgan supports the theory of the local origin of cancer, which is at the present time undoubtedly steadily gaining ground in this country, chiefly in consequence of the able advocacy it has received from the surgeons of Middlesex Hospital. It is needless for us to recapitulate the arguments by which Mr. De Morgan supports his views, as all our readers have doubtless already read the original papers when they appeared in our columns; but to the practical conclusion we wish particularly to draw attention. If a surgeon, after due consideration, adopts the view of the local origin of cancer, he must adopt it to act upon, and not merely as an interesting pathological fact. If cancer is disseminated through the system by means of solid germs proceeding from the primary growth, the safety of the patient depends upon the removal of the primary growth before such dissemination has occurred. The delay of a single day may be fatal to the patient. To quote Mr. De Morgan's own words: "To-day the glands may be free; to-morrow they may be affected. To-day all disease may be within range of an operation; to-morrow disease may be distributed far beyond." This is the really important part of the subject, and it is this which Mr. De Morgan brings before his readers in a manner so clear and so forcible that it cannot fail deeply to impress every thinking surgeon.

Earth as a Topical Application in Surgery. By ADDINELL HEWSON, M.D., one of the attending Surgeons of the Pennsylvania Hospital. With Four Photo-relief Illustrations. Philadelphia: Lindsay and Blakiston. London: Trübner and Co. 1872.—The deodorising and disinfecting properties of dry earth are well known; and we are not at all surprised to find that these have been turned to advantage in modern surgery. At first sight there would seem to be a host of objections to the employment of "dry earth" as a dressing for wounds and ulcers; and we can readily understand that surgeons who tried it might be exposed to some ridicule, by the method being compared to that of making "dirt pies"—a recreation which appears to possess such charms for children. Whether it is likely to be adopted to any extent in this country is more than we can say; but a little consideration will, we think, serve to dispel the very natural idea that the application of earth to wounds must necessarily be a dirty procedure. Dr. Hewson's volume not only gives a theory of the *modus operandi* of earth as a topical application in surgery, but it contains the history of a large number of cases of different kinds, in which its effects have been fully tested in hospital and private practice. The earth employed was always essentially of the same kind—viz., a yellow subsoil, rich in ferruginous clay, and entirely free from all sand, grit, or foreign matter, obtained from deep diggings, well dried (but not roasted), and sifted through a fine flour-sieve. In cases requiring the support of plasters, Dr. Hewson uses strips of a material composed of a strong silken tissue called Donna Maria gauze, or a less expensive but equally efficient article—tarletan, such as is commonly employed by old ladies in making caps. In both cases, collodion, painted across the meshes of the material, is used for fixing the ends of the strips at a sufficient distance from the wound. The meshes of the gauze not only allow of the free escape of discharges, but of the direct contact of the topical application. One of the cases given in the volume is not without significance. It is that of a woman with an epithelial ulcer on the side of the nose, who was attracted to the Pennsylvania Hospital from the accounts she had heard of the utility of the "dry earth" method of dressing. She improved rapidly under its use, but became the subject of a lachrymal abscess, and in consequence of getting discontented and low-spirited she left the hospital. The ulcer commenced spreading, and continued to do so in spite of the use of ointments &c. She then procured some earth from her own garden, dried it, and applied it to the ulcer, and with such success that she walked ten miles to show herself at the hospital as cured, in her opinion, by this method of treatment. The histories of ninety-three cases are given in which the application of dry earth was adopted, and they embrace wounds of different sizes and in various states of inflammation, suppuration, or sloughing; and we are bound to say that, judged by the experience which the author of this volume has had of dry earth in such cases, it appears to be an efficient and satisfactory kind of dressing. It has the obvious merits of being "dirt cheap," easily procured, and within the reach of everyone desirous of testing it.

Modern Turkey. By J. LEWIS FARLEY, Consul of the Sublime Porte at Bristol. London: Hurst and Blackett. 1872.—This book is pleasant reading, and contains several points of medical interest. The beneficial effects to health that may be derived from a residence in Syria are dwelt upon, and the author thinks that many of the ailments to which the inhabitants of Northern and Western Europe are liable would obtain relief from a residence in the clear, dry, exhilarating atmosphere of Beyrout; particularly the earlier stages of consumption, dyspepsia, and other affections of the digestive system—at least the author speaks from the benefit he experienced in his own person. There are few places that can, he thinks, compare with Beyrout, in the various inducements which it offers to the traveller and the invalid. The country is surrounded also by places of historical interest. Cyprus, Tyre, Acre, Carmel, and a six hours' journey thence brings you to Nazareth, Mount Tabor, and Genesareth; twelve hours from Beyrout is Damascus the beautiful; Baalbek is but forty miles distant; while the villages of Lebanon, the Cedars, and Nahr-el-Kelb, and the Cave of St. George, are only an afternoon's ride. We can endorse much of what is said as to the beauty of the scenery, the climate, and the advantages of Beyrout as a residence. To the general reader the book is of interest for the information that it contains regarding the

manners, social system, and religion of the Turks, about which a good deal of ignorance prevails among Christians.

Encyclopædia of Chronology, Historical and Biographical. By R. B. WOODWARD, B.A., and W. L. R. CATES. pp. 1487. London: Longmans. 1872.—This is an exceedingly useful work, particularly to those engaged in literary labours. It contains the dates of the chief events in the history of nations, and a record of wars, alliances, and treaties of peace; also the periods of discoveries in the various sciences, with inventions and improvements which have contributed to the advance of civilisation and the increase of the comforts and refinements of life. In the volume will be found likewise notices of the lives of eminent men, with their principal works, literary, scientific, and artistic. We extract one article as an example of the plan of the work:—

"MEAD, RICHARD, physician,—b. near London, 1675—M.D. Padua, 1695—settles in London, 1696—physician to St. Thomas's Hospital, 1703—F.R.S., 1704—M.D. Oxon., 1707—lecturer to Surgeons' Hall, 1711—F.R.C.P., Ap. 1716—physician to Geo. II., 1727—d. in London, Feb. 15, 1754. *Mechanical Account of Poisons*, 1702—*Dissertation on the Scurvy*, 1749—*Medicina Sacra*, 1748—*Monita et Præcepta Medica*, 1751—edition of *Servetus's Christianismi Restitutio*, 1723."

In a book of this sort and size absolute freedom from errors is of course unattainable; but so far as we have been able to test it, this Encyclopædia, in respect of accuracy, at least rivals contemporary kindred works. The typography, also, is clear—an important consideration in this much-reading age.

On the Antagonism between the Actions of Physostigma and Atropia. By THOMAS R. FRASER, M.D. From the Transactions of the Royal Society of Edinburgh, Vol. XXVI. Printed for the Society by Neill and Co.—Dr. Fraser deserves great credit for this elaborate treatise, which forms a valuable addition to pharmacological literature. The author commenced his researches on the antagonism between the lethal actions of physostigma and atropia in 1868, and the experimental data and views embodied in this work harmonise with what Kleinwachter and Bourneville had previously written. On the subject of nomenclature we will observe that the term "physostigma," applied to the active alkaloid principle of the Calabar bean, is but a modification of the generic name of its botanical source. The experiments were chiefly performed upon rabbits by subcutaneous injection. The general conclusions arrived at from the results of 161 experiments are that atropia prevents the fatal effect of a dose of physostigma by influencing the function of certain structures and producing a physiological antagonism. The work is illustrated by careful diagrams, and altogether it exhibits patient, honest toil, with considerable literary skill.

Natural Philosophy for General Readers and Young Persons. Translated and edited from "Ganot's Cours Elémentaire de Physique" (with the Author's sanction), by E. ATKINSON, Ph.D., F.C.S. (Staff College.) London: Longmans. 1872. Abridgments are too commonly mutilations pure and simple, and Dr. Atkinson has done wisely in not adopting suggestions for an abridged edition of his translation of Ganot's "Elémens de Physique," preferring rather to open up a new soil which, having regard to the object to be attained, promised a more satisfactory return for its culture. The "Cours Elémentaire de Physique" has had an extensive circulation in France, and in the English garb provided for it by Dr. Atkinson there is little doubt of its very generally becoming what he designed it to be—namely, "a text-book of physics for the middle and upper classes of boys' and of girls' schools, and a familiar account of physical phenomena and laws for the general reader." In range it claims to represent the amount of knowledge required for the Matriculation examination of the London University. It is well printed, the illustrations are clearly cut, and for facility of reference all the various sub-divisions are numbered and copiously indexed.

Annual Report of Broadmoor Criminal Lunatic Asylum.—Broadmoor receives a peculiar class of patients. Of 77 admissions during the year no less than 17 had been charged with murder. The sanitary history of the asylum is also peculiar, and we are therefore disappointed in finding in the report before us little more than a statement of very complicated statistics. Then it is not long since that loud complaints were made against waterclosets, sewers, and sewage irrigation, and a large expense was incurred in substituting earth-closets. It would be particularly interesting now to know with what result. One thing is certain, that the sewerage was shamefully constructed in the first instance, since we find from the report that no less than 7400 ft. of drains have been taken up and relaid. No wonder, under such conditions, that the sewerage was a failure, and that the inmates suffered in their health. Formerly, too, there were acknowledged difficulties in the introduction of the non-restraint management of this extraordinarily dangerous and desperate class, and it would have been particularly interesting to know whether those difficulties have been overcome. We hope that in future reports we may have some further information on these important points.

The Climate of Uckfield in the Weald of Sussex. By C. LEESON PRINCE, M.R.C.S., Fellow of the Royal Astronomical and British Meteorological Societies, &c. London: J. & A. Churchill.—Mr. Prince's book is an *olla podrida* of meteorological records, weather prognostics, vital statistics, and poetical selections, ranging from Virgil, Pliny, and Aratus, down to the much-abused Dr. Watts. Unfortunately, nothing is said of Uckfield proper—Uckfield as a habitation; and, after perusing the book, the reader will know no more of the place than before, the only guides to the formation of an opinion on the matter being two meagre pictures, one representing "the old bridge at Uckfield," with a solitary cottage at one end, and the other a very primitive little building, which at first sight we should incline to think was a horse-box, but which is in reality the "Uckfield Observatory." However, to those who live in the place the book must have some interest, as the records embrace a period of nearly thirty years.

ON MR. STANSFELD'S PUBLIC HEALTH BILL.

BY HENRY W. RUMSEY, M.D.

ALTHOUGH the Joint Committee of the Social Science and British Medical Associations has not had the advantage of being supported by THE LANCET in their endeavours to obtain certain important amendments in Mr. Stansfeld's Public Health Bill, yet, in more than one leading article, the proposition for *County Medical Officers of Health* has been advocated, at least as a reasonable alternative for the Government scheme of mere central inspection. It seems proper, therefore, to place before the numerous readers of THE LANCET some suggestions for the improvement of that Bill, which, in its present form, is likely to disappoint the hopes of many who have long fought the battle of sanitary reform.

Practically there is very little difference of opinion as to things which ought to be done in every locality. All who have studied public hygiene are agreed upon the necessity of certain fundamental sanitary measures. There may be differences as to details, such as the best method of removing excreta from human habitations, or of preventing the pollution of wells and rivers. But there is no controversy about the propriety of enforcing upon communities

the obligation to abolish, as far as possible, all causes of preventable disease and excessive mortality.

The real question at issue is—What is the proper local administrative machinery for public-health management?

It can hardly be denied that unless competent, willing, and efficient local administrative authorities are constituted, the difficulties in the path of public sanitation may prove insuperable. It is also well known that the very machinery created by the Public Health Act, 1848, Local Government Act, 1858, and Sanitary Act, 1866, with their numerous amendments, has, in a large number of localities, raised up serious impediments to the progress of improvement, and to the general enforcement of sanitary reforms. To confirm that administrative machinery on a grander scale, as now proposed by Government, would be a fatal mistake, establishing more firmly obstacles which hereafter would be almost irremovable. We have had, during the last thirty or forty years, quite enough of blundering legislation and defective organisation, ending in a chaos of inoperative laws and conflicting authorities.

Now it is on the administrative question that we have the misfortune to differ with both the Royal Sanitary Commission and the Local Government Board. With regard to the former, our arguments have been stated at length in the Report of the Joint Committee on that of the Royal Commission—arguments which I believe have never been fairly met, and which certainly have never been refuted; whilst our report has been generally accepted by sanitarians, especially in the provinces, as indicating the true principles on which this question should be settled. With regard to the latter, our recent memorial to Mr. Stansfeld has pointed out the main defects and shortcomings of the Government measure, and suggested the principles, even an outline of the methods, by which existing authorities might be modified so as to secure the objects of sanitary legislation.

From the first we have regarded the medical officers of the Poor-law unions, the registrars of births and deaths, and the public vaccinators, as necessary elements of any organisation for purposes of public health. The work done by the medical officers, and especially that which they may have to do when a proper registration of sickness attended at the public expense shall be established, is truly *sanitary* work; indeed, it supplies the scientific foundation for all sanitary measures. Therefore, the local authorities in this department—viz., the boards of guardians, in so far as they administer medical relief, or require sanitary reports and sickness returns, or make arrangements for vaccination and registration (to say nothing of their functions as to nuisances and disinfection)—are truly *sanitary* authorities, and as such they must be dealt with in any Public Health Bill.

Although we have objected, for very good reasons, to place the Poor-law medical officers in the position of the *sole* officers of health in their respective districts, we have acknowledged as plainly as the Royal Commission the necessity of their well-ordered co-operation. Moreover, we have objected to the recommendations of the Commission on this ground among others—that they made no provision for the joint action of the boards of guardians with the local bodies in towns and districts under the Local Government Act, which are required to carry into effect other sanitary measures. Yet Mr. Stansfeld, on the authority of the Commission, proposes to compel all these numerous local boards to appoint medical officers of health, who may or may not be Poor-law medical officers, but who, at all events, would require the systematic and legalised aid of the Poor-law Department.

In our report on that of the Commission, especially in sections 12, 13, and 14, we showed the error of maintaining the division of sanitary functions between these two kinds of local authority, and the absurdity of that duplication of authority at the *extremities* of the system which the Act of last session has abolished at the *centre*, and which has the effect of placing every Poor-law medical officer in towns under two masters, as well as of dividing the responsibility of hospital provision between two boards. We urged accordingly "the universal comprehension of all the various subjects of *sanitary* administration within the same district,"—that is to say, the consolidation or unification of local sanitary authority, a point theoretically admitted, but practically ignored, by the Royal Commission.

Again, in our recent memorial, we protested against both the existing and the proposed future duplication of authority; and the first of our final recommendations pointed out the method by which local sanitary administration might be consolidated.*

I am prepared for the reply, that the President of the Local Government Board may take sufficient powers to compel the guardians and the local boards, or at least their respective officers, to work together for certain purposes,—a power which, as Mr. Stansfeld intimated, "does not appear on the face of the Bill." But we can only judge of the measure as it appears. We can accept of no understandings or possibilities which are not authorised by the letter of the Act. Unlimited and unknown powers "taken" by a central authority from which there is no appeal, are intolerable to Englishmen. The powers of interference and coercion conferred by the Public Health Bill upon the Local Government Board far exceed anything of a compulsory kind proposed by those who want unification of local authority. The fact is that we do not desire to touch the powers of local boards and town councils as to any of the matters which they administer under the Public Health and Local Government Acts, except perhaps those which belong to the drainage area, or other matters for which Mr. Stansfeld himself contemplates united action. On the plan sketched out in our recent summary the towns would remain intact. We simply propose that for certain purposes common to them with adjacent or co-existent authorities, the town boards should be required to co-operate with the boards of guardians.

It is plain that such combination of authority would increase the powers of "urban" authorities by giving them the influence they ought to possess in the administration of medical relief, in the provision of hospital accommodation, in medical visitation of houses and places, in sanitary reports, in arrangements for vaccination and disinfection, as well as in the registration of mortality and sickness and the causes thereof.

On the mistaken hypothesis that we wish to interfere with local government, it has been assumed that the towns would vehemently resist any proposal to give them powers of co-operation with boards of guardians. But I believe the reverse to be the fact; for inquiries in several places lead to the conclusion that such additional powers would not be at all unacceptable to town authorities.

Proceeding on the principles now defended, the first amendment in Mr. Stansfeld's Bill should be made in Clause 4, for which, and for parts of Clauses 5 and 6, the following might be substituted:—

(A) "From and after, &c.....the unions (or registration districts) of England and Wales shall constitute the local sanitary districts, and shall be respectively subject, in certain matters, to be determined by the Local Government Board, to the jurisdiction of authorities to be called District Councils. Every such District Council shall be composed partly of elected members of urban authorities, hereinafter mentioned, and partly of elected guardians of the union, and partly of *ex officio* guardians. The number of members to be chosen by each urban authority within the union, and the number to be chosen by the board of guardians, and the number of *ex officio* members shall be determined by an order of the Local Government Board, which order shall also define the purposes for which the said District Council is formed, and shall contain regulations as to the qualification of members of the District Council, as to the mode of their election, as to their continuance in office, as to casual vacancies in the District Council, as to its meetings and officers, and any other matter or thing with respect to which the Local Government Board may think fit to make any regulations, &c."

The above clause would of course render necessary some alterations of subsequent clauses. It has these obvious advantages: it would leave each urban authority intact as to matters which are *not* common to the whole union; whilst it would commit to the District Council all general matters—such as medical service, sanitary inspection, disinfection, vaccination, and the registration of births, deaths,

* "We accept, provisionally, the registration district as the unit of area, subject to future correction of limits in conformity with revised county boundaries; and we ask that every town or local board district included in a registration district may be enabled and required to act with the board of guardians by a joint committee, as the local authority for sanitary and medical purposes."

and sickness,—as well as such matters as are mentioned in Clause 16, par. 2, under "general expenses." The "special expenses" (see par. 3 of the same clause) would be those which specially concern the towns, as paving, lighting, scavengering, &c. The drainage of the whole area should be under the District Council; whilst the expenses thereof incurred in each local-board district or town would be "special," and as such charged to each as a "contributory place" (see Clause 16). Every part of the country would thus secure a more extensive, and therefore a better, if not a perfect, drainage area; and the Local Government Board would still be able to combine "sanitary districts" for this or other purposes mentioned in Clause 25.

By means of a "District Council" for the whole union we should obtain the advantage of a *single* authority, containing valuable town elements, for the administration of medical relief, the organisation of dispensaries, the provision of hospitals, vaccination, and other matters of preventive medicine; we should also have the benefit of complete unification of all medical, statistical, and inspectorial arrangements within a well-known and established boundary.

The "table" of urban authorities might remain as in the Bill, merely transposing the columns and omitting the word "sanitary" in the headings.

I would now call attention to the proposed "port authorities":—Clause 19 constitutes "any sanitary authority," &c., or "any conservators," &c., the sanitary authority over the whole port. The necessary combination of authorities is here evidently wanting. What is required for ports is that all the authorities connected with the port should be brought to act together. Thus, the authority which appoints medical officers and registrars, and every sanitary authority whose district abuts on the port, as well as every adjacent district called "riparian" in the Bill, should be combined for the purposes of a port authority. This, I believe, cannot be effected under Clause 19, as it now stands, although Clause 20 seems to assume that the so-called "riparian" authorities are to be treated as "contributory places." It ought to be made quite clear that, for port purposes, the several authorities concerned are to be united; and this the clause does not do. The principle of "contributory places" is so excellent that Mr. Stansfeld might have adopted it to a greater extent. It is this principle in Clause 16 which puts an end to "special drainage districts" and makes this Bill so far an improvement upon Sir C. Adderley's. Let him carry the principle a little further, and it would be rarely if ever necessary to form a new Local Government district.

With regard to the 25th and following clauses for the "union of districts," if not superseded by the establishment of county boards, an amendment is required to the effect that the districts to be united shall be contained in the same county; and that where any sanitary district (not being under an urban authority) adjacent to the intended united district, is situate in more than one county, those parishes which belong to the same county as the united district should be dealt with according to their gross rental as proposed by Mr. Knatchbull Hugessen in 1869—that is to say, either formed into a separate sanitary district or annexed to an adjoining district, ready for combination with the aforesaid united district. Any single parish divided by a county boundary would belong, by the same clause, to that county which comprises the greater part in value (or area) of such parish. The same provision would apply to boroughs or local-board districts situate in more than one county. A further provision would be required to enable *united districts* on opposite banks of any river which forms a county boundary to combine for purposes of river conservancy only.

Clause 25 should then be amended as follows:—

(B) "When it appears to the Local Government Board that it would be to the improvement of the public health and to the advantage of any sanitary districts *situate in one county* to be formed into a united district for any purposes of the Sanitary Acts, the said Local Government Board may, by a provisional order, form such districts into a united district."

But a combination of districts for the sole purpose of appointing a principal medical officer of health ought not to require the troublesome formality of a provisional order.

Clauses 26 and 27 would also have to be amended, so as to empower the county justices to aid in the formation of unions of districts.

Those who have followed me thus far will see that the question still remains, whether it were better to accept Mr. Stansfeld's provisions for the union of districts, or to make a further effort to obtain county boards. If the Public Health Bill is to pass during this session, it might suffice to endeavour to amend, as proposed, Mr. Stansfeld's clauses, so that his united districts might not hereafter interfere with a more complete county organisation.

But if sanitary legislation be unavoidably postponed until 1873—not an improbable event,—it would, in the opinion of many, be wiser to move for the adoption of a series of clauses, very ably drawn up by Mr. Michael, the barrister and one of the secretaries of the joint committee, for the formation of county sanitary boards.

That county administrative boards, containing a representative element, will be established within a few years, is almost certain. Greatly will such a measure, if wisely contrived, redound to the honour of any Ministers who may carry it through Parliament and at the same time succeed in harmonising the long existing conflict between county and parochial (or Poor-law) jurisdictions, by providing for a mutual adjustment of their respective boundaries.

The acknowledged advantages of a far more extensive area, not only as regards many great sanitary undertakings and the wider objects of administration, but also as affording means and opportunities of obtaining a higher and more adequately salaried class of officers, may be claimed by united districts almost to the same extent as by counties. But the main arguments for the county *versus* the united district may be stated thus briefly:—

1. The present administrators of counties—justices of the peace—are an essential element in the composition of any new provincial authority having a superior jurisdiction to that of the ordinary sanitary district. The county magistracy, as a body, are comparatively free from trading interests, corrupt bias, and political party influence; and, being for the most part well-informed gentlemen, their decisions carry a weight which can never belong to the minor elective boards. There is no body in provincial society on whom the public rely for ability and independence more than on the justices in sessions; while, as representing the property as well as the intelligence of the shire, they are sufficiently averse to any needless or extravagant outlay.

2. The county justices already exercise many important functions connected with the public health, and are therefore sanitary authorities. For example: (*a*) They visit, and appoint visiting physicians to hospitals for the insane. (*b*) They regulate the sanitary condition of the inmates, not only of those asylums, but also of prisons, reformatories, and other corrective establishments. (*c*) They carry into effect, with great vigour and success, measures against the contagious diseases of cattle, intimately connected with human pathology. (*d*) They regulate and pay for coroners' inquests to ascertain the cause of death, a most important item of sanitary inquiry. (*e*) They appoint engineers or surveyors for public works, and have to do with river conservancy as far as bridges are concerned. And (*f*) they are empowered to appoint analysts, to check adulteration of food and impurity of water-supply. Now, as they perform these duties with satisfaction and benefit to the public, they are not likely to be deprived of their powers by Parliament. Why not invest them with other functions of sanitary administration?

3. If another kind of superior local authority, such as Mr. Stansfeld's "Joint Boards," be constituted in areas having no relation to counties, and perhaps including parts of more than one county, and be empowered to execute other sanitary duties, there will result a duplication of sanitary authority in wide and unconformable areas, thus establishing a new source of confusion in local and county government.

4. Mr. Knatchbull Hugessen's Bill of 1869, as well as Mr. Goschen's of 1871, provided for representative county government, although, perhaps, not on the best principle. At all events these measures showed how the county area might be further utilised for purposes of local administration. Why not at once take that area for a combination of local sanitary authorities with the magistracy?

5. We should then possess a suitable Court for the appointment of county officers of health, thus diminishing very properly the hyper-centralisation of the present Bill.

There is a difficulty, as we all know, arising from the

irregularity of county boundaries. But this is anything but an insuperable difficulty. A general revision of districts and boundaries might be safely committed to county authorities, subject to the control of the Local Government Board.

If the claims of the county be established as an area for the higher purposes of sanitary administration, it might be advisable, in default of county boards formed on the elective principle, to propose the following clauses for insertion in the Public Health Bill, in place of Clause 11, and of all in Clause 13 which relates to medical officers of health.

(C) "Until such time as, by Act of Parliament, county boards shall be established for the purpose of administering the affairs of counties, a county authority for the purposes of this Act shall mean the justices of the peace of a county, or of any riding, division, or part of a county having a separate commission of the peace, except as in hereinafter provided. And such county authority, in quarter or special sessions assembled, shall, from time to time, appoint a (principal) medical officer of health, or more than one such officer if the population exceed 250,000, or if required by the Local Government Board. If more than one such officer be so required, such county, or part of a county, shall be divided by the county authority into so many districts as there are to be medical officers of health; every such scheme of division being subject to the approval of the Local Government Board."

Although, under the administration of county magistrates, there would be less necessity for providing that the appointment to, and removal from, office, should be subject to this approval of the Local Government Board, it is, nevertheless, considered important that Parliament should sanction this principle, and, therefore, I recommend its adoption, together with the following provisions:—

(D) "The Local Government Board shall issue regulations, by a general order, respecting the duties and qualifications of medical officers of health. Every *principal* medical officer of health shall devote his whole time and attention to the duties of his office. He shall report to the county authority, and to the several local sanitary authorities within the district to which he is appointed, on all matters concerning the public health, and on all causes of disease and degeneracy which may come under his notice; and he shall afford advice and aid to all such sanitary authorities. His salary, with reasonable allowance for a clerk and for travelling expenses, shall be fixed by the county authority, subject to the approval of the Local Government Board, and shall be charged half to the county rate and half to the Consolidated Fund."

To meet the case of existing appointments in provincial towns, I would suggest that, wherever a medical officer of health is appointed by the local sanitary authority, under the provisions of a local Act or of the Public Health Act 1848, and with the sanction of the Local Government Board to the terms and conditions of such appointment, every such place be exempted from contributing to the County Rate in respect of the salary of the county medical officer; and that every statutory obligation to appoint a medical officer of health, except on the same conditions as are required for county officers of health, be repealed.

Some such clause as the following should be substituted for Clause 13 of the Public Health Bill:—

(E) "In all places where a medical officer of health is not appointed by the local authority, the district medical officers of unions shall be required to assist the county medical officer of health, by reporting to him all such facts relating to sickness and mortality, and the supposed causes thereof, and by performing such duties of a preventive nature as may be directed by the Local Government Board, and every such district medical officer shall be properly remunerated for such duties on a scale approved by the Local Government Board."

It should indeed be made imperative on all District Councils to appoint *deputy or assistant* officers of health, who would of course be medical practitioners, whether under the Poor Law or not.

But no counter-propositions or arguments have shaken our conviction that, in the interests alike of the public and of the profession, all health-officers who do not take the position of deputy or assistant, that is, all the *principal* medical officers of health, whether in counties or in first-class towns, should be required to surrender their entire time and effort to their official duties, and be remunerated accordingly. There may be some places, desirable as local centres of sanitary advice, in which, owing to the sparsity of the surrounding population, it might be expedient that the Local Government Board should be authorised to permit the principal officer of health to attend in consultations, or to hold office in public institutions; but all such cases should be reported to Parliament, with the grounds for the exceptional permission.

The appointment of a principal officer on the preceding conditions should be compulsory on towns exceeding a quarter of a million of population; and even for towns not so vast the local and county authorities might be authorised to annex a number of adjacent sanitary districts, sufficient to render the officer independent of private practice. Whatever may be the precise course taken with regard to provincial organisation, every effort should be made to prevent the enactment of that most objectionable and fallacious clause of the Public Health Bill which makes it compulsory on every little local authority to appoint a full officer of health.

I am constantly receiving remonstrances on this point from eminent persons, medical and others, in different parts of England. I may quote from three letters very recently received.

(1) From an active and philanthropic magistrate in the northern counties:—"I don't expect any good from Mr. Stansfeld's proposition for health officers, and a move in the wrong direction would be simply mischievous. To appoint the Poor-law doctors, from my experience of the article, without a superior officer, will convert the whole business into a farce."

(2) From a distinguished provincial surgeon and an original investigator of the exanthemata:—"I am quite sure that without county arrangements no really efficient sanitary measures can be carried out."

(3) From a University Professor of great repute in matters of health:—"I hold that it is the duty of the State to avoid multiplying the number of cases in which a man's private interests are likely to tempt him to *transiger* or tamper with his sense of duty to the public. There will always be plenty of temptations of this kind, do what we will. Legislation is immoral which makes them more numerous than they must necessarily be, or which creates such opposition and antagonism *de novo*. With how much force does this enunciation of one of the most ordinary principles of human action apply to the using Poor-law medical officers as health officers."

If Mr. Stansfeld persists in this project, contrary to the weight of authority and experience, he will alienate the support of the best men in the country. I am aware that he might reply that he was supported by the five medical members of the Royal Commission. My rejoinder would be that four out of the five have little, if any, personal experience of the provincial districts of England, and that the only one who does practically know them is at issue on this point with, I believe, every other provincial member of the very numerous and influential Committee on State Medicine, of which that gentleman was once chairman, and which procured the appointment of the Royal Commission.

Only a few words more. The distinction between principal and deputy in the health-officer appointment is not merely nominal, as Mr. Stansfeld seems to think. It recognises and provides for a real and a twofold necessity: first, the necessity for constant and accurate observation and report of facts by those engaged about the dwellings and the sickness of the people, and this is the *deputy's* office; secondly, the necessity for superior special knowledge in making the best use of that information, and of impressing it at once upon local authorities, with that official independence which gives weight to opinion and force to advice, and this is the *principal's* office.

I have prepared some clauses relating to returns and registration of sickness, births, deaths, and the causes of deaths, with provisions for inquiry into uncertified deaths, and unsatisfactory certificates and returns, and for payment for sickness returns and sanitary reports, &c. &c. These clauses I may offer for publication in a future number.

Cheltenham, May 22nd, 1872.

New Inventions.

SWIFT'S IMPROVED POCKET MEDICAL AND SEASIDE MICROSCOPE.

NUMEROUS as are the small microscopes for what we may term amateur work, there is a certain want for a compact instrument which can be stowed away in small compass, and which shall nevertheless be an instrument of sufficient power to be available for real work—for example, the examination of urine, sputa, tumours, &c. Such a microscope would be a boon to the medical man who is travelling about from place to place, as the Indian medical officer, one of whose chief objects is to avoid loading himself and his baggage with unnecessary impedimenta. To such men

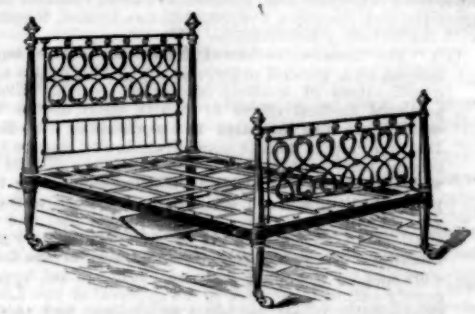
a big microscope is often more than a great evil—it is an impossible companion. Our attention has been called to a microscope of the kind to which we refer, which, we think, has many excellent features about it. The above illustration represents the instrument—in the one case (left-hand view) as ordinarily used, and in the other upon a stand, which can be fitted to it if necessary. The instrument, comprising an inch objective, eye-piece, glass stage plate,

three glass covers, steel forceps, diffusing tube, and two needle-points, packed in a neat morocco case 6 in. long by 2¼ in. wide, and 2 in. in depth, can be obtained for £3 15s.; a quarter-inch objective will be £1 extra, and the instrument with it will magnify 500 diameters. The microscope is provided with a first-class slow motion, which will focus steadily and smoothly under high magnifying power. The coarse adjustment for focussing low powers is effected by sliding the body of the microscope in its tube fitting. The body of the instrument is fitted with a long draw-tube, by which means the magnifying power of the objective can be greatly increased. The stage is so constructed that the object can be moved with great freedom, and for portability, this stage being large, it is made to turn on a centre, so that it may be flat with the microscope for the convenience of packing in the small case described. The second illustration represents the instrument packed away in its case, and a box of accessories, which consist of spot lens for dark-ground illumination, condensing lens for the illumination of opaque objects, polarising apparatus, with a 3 in. by 1 in. selenite stage plate, live box, and tripod stand for fixing the instrument in an upright position (see other figure); the whole of the apparatus thus described being packed in a neat leather-covered box 4 in. square by 1½ in. deep. Price, including ½ in. objective, £3 7s. Packings are also supplied in the same case for two objectives and one extra eye-piece if required.

The instrument is made by Mr. Swift of University-street, Tottenham-court-road.

M'ISAAC'S PATENT BED-TABLE.

WE illustrate this week a very useful and ingenious bed-table, invented and patented by Mr. M'Isaac, of Fareham, and manufactured by Messrs. Peyton, of Wigmore-street.



It is made to fix by screws to the frame of any ordinary bedstead, either of wood or iron; and when not required, it folds up and turns away under the bedstead. It has been for some time in use in St. George's Hospital, where it has

given great satisfaction; and it will be found very serviceable in private practice, especially in the lying-in room, for it carries a meal in the most convenient and safe of all possible positions. Perhaps it might be improved by making the table convertible into a reading-desk.

THE LANCET.

LONDON: SATURDAY, JUNE 1, 1872.

AT the Comitia Extraordinaria of the College of Physicians on Friday of last week, a discussion arose which has produced a wide-spread and just anxiety among the Fellows as to what is to be the working of the conjoint examination system. It will be recollected that in the "scheme" drawn up in January last an important feature was the appointment of a "Committee of Reference," consisting of representatives from the Universities and the two Colleges, whose duties were clearly defined as follows: 1. To determine the number of examiners to be assigned to each subject of examination. 2. To nominate the examiners for appointment by the several co-operating medical authorities. 3. To arrange and superintend all matters relating to the examinations, *in accordance with regulations approved by the co-operating medical authorities.* 4. To consider *such questions in relation to the examinations as may be referred to them by any of the co-operating medical authorities*, and to report their proceedings to all the said authorities.

Now it is obvious on the face of the words which we have italicised, and it is also known from the statements which Dr. QUAIN made at the recent Comitia, that the whole intention of those who proposed the appointment of this Committee of Reference was simply to provide a machinery for working the conjoint scheme in strict subordination to the wishes of the general bodies of the Colleges and Universities which respectively take part in it. This being the case, great was the surprise of the Fellows of the College of Physicians on finding put before them on the table a document marked "private and confidential," and which proved to be an elaborate scheme of recommendations from the existing Joint Committee of the Colleges, which are to be laid before the Committee of Reference whenever that is appointed, and are intended to influence, though they cannot compel, the Committee to pledge themselves to a number of minute details respecting the working of the scheme. The President particularly insisted that this document was to be regarded as a confidential communication, and the Fellows generally of course accepted this view, which we accordingly shall respect. But we are under no obligation, either of duty or inclination, to suppress the extraordinary conversation which followed. More than one of the Fellows naturally inquired whether this "confidential" paper was not to be discussed; when, after a considerable amount of ambiguity had been displayed by the officials who responded to this challenge, it became sufficiently clear that the College was to have no opportunity of discussing these elaborate recommendations at all at the present stage, and that, in fact, the only chance left to the Fellows of preventing any of these suggestions from being finally carried out was that of voting against the whole scheme *en bloc* as it may come down to them from the Committee of Reference.

A more extraordinary way of dealing with a body like the College of Physicians has certainly never been heard of. The Fellows at large would assuredly never have entrusted any powers whatever to the Conjoint Committee had they supposed that they were to be treated in this off-hand manner. It appears to us that the President and the Censors of the College have forgotten the hole of the pit from which they were digged. They are, after all, but the creatures of the College; and it is rather too much that they should now take upon themselves to forbid the open discussion by the Fellows, at that early stage of proceedings when alone discussion can be effective, of such exceedingly important matters as those which must needs be contained in the paper about which such an absurd and insulting mystery has been made. Dr. QUAIN deserves the thanks of the whole College for the manner in which he protested against this indignity, and for the good sense with which he pointed out that the College would stultify itself in the most ridiculous manner if it allowed the Committee of Reference to be constituted as a kind of *imperium in imperio* instead of its being a mere mouthpiece of the general bodies of the colleges and universities.

We cannot but hope that even the officials of the College of Physicians will speedily perceive that they must give way, and allow their preliminary recommendations to be fully discussed by the Fellows. They may be quite certain that the governing bodies of the universities will insist upon discussing them with the most jealous care. And as for the Council of the College of Surgeons, that body has already taken the initiative, and so far from calmly allowing the paper of "recommendations" to be merely flourished before their faces and then withdrawn, has entered upon a most minute discussion of it, paragraph by paragraph. If Dr. BURROWS, Dr. RISDON BENNETT, and Dr. SIBSON are wise they will give way at once upon this point; otherwise it will certainly be the imperative duty of the more liberal Fellows to pledge themselves to reject the Conjoint Scheme altogether, as a mere impertinence.

THE plague of small-pox still continues to rage. Members of the medical profession, small-pox hospital nurses, and the more intelligent section of the people who have, like medical men, availed themselves of the protection of a second or third vaccination, move about almost untouched by it. But there is a huge number of unvaccinated or imperfectly vaccinated persons who, unless something more thorough is done to prevent it, will continue to feed the seething mass of disease which exists in all parts of the country until every unvaccinated person is marked with the disease, and even a great many of the vaccinated are made ill for three or four weeks by it. Even in London the mortality is still very shocking, and some of the fatal cases that occur are more like death from plague than anything else, showing a complete and rapid dissolution of the blood. As we have reported lately, a town with 49,230 people in it—Walsall—had 21 deaths from small-pox in one week. In Norwich, with a population of 80,000, it is estimated that in eight months 540 have died of small-pox. In Dublin, a few weeks ago, the estimated mortality

was 1000, a quarter of them being heads of families. All the statements of mortality, of which we have only given specimens almost at random, help us very little to a conception of the mischief and misery produced by the epidemic. The great number of cases that are not fatal; the sickening odour of the houses, or rather rooms, in which a large number of cases—about 80 per cent.—are treated; the interruption of work and wages implied by the sickness; the boils, ulcers, carbuncles, and prolonged debility which often characterise the convalescence; the loss of one or both eyes; the loss of comeliness of appearance,—are a few of the evils of this disease that find no expression in the Bills of Mortality, but which greatly aggravate the calamity.

But the question is, can anything more be done by the State or by the profession to interfere with the natural progress of the disease? Is it any part of the State's duty to concern itself further with this huge sickness? Should it not rather allow it and the victims of it to have their way, leaving them to settle accounts with each other, and contenting itself with paying the expenses of sickness and funerals and all the resulting pauperism? There was an old State of the world which thought the health of the people the first thing to be regarded by legislators. But now the people seem to think so little of their health that they allow their law-makers to pass month after month with scarcely an allusion to the plague that is almost absolutely under the control of medical science. Those who have been building up in their imaginations a great and beneficent system of State Medicine under which the operation of the great causes of disease were to be controlled must abate their hopefulness. If small-pox cannot be treated despotically, what disease can? If the State may not use its authority to order and insist upon any amount of vaccination that may be necessary for the suppression of this epidemic, what can it hope to do? No such case is to be made out for any other piece of State Medicine. Sewerage is essential; so much cubic space is good; the limitation of the hours of work of young persons is undoubtedly right; apparatus for disinfection should exist in every town: but the evidence of the utility of any of these measures is far less direct and appreciable than that of the immense value of vaccination. And yet it must be admitted that the existing system of public vaccination has been sadly discredited and almost mocked by the experience of the present epidemic. It has been attempted to establish a system of public vaccination which has reduced to a minimum the number of public vaccinators. The personal influence of the majority of practitioners has been set aside in favour of an abstraction called stational vaccination by a stranger. No educational attempt at refuting the nonsense talked against the Vaccination Acts has been undertaken. There is much in the ignorance of the public and in the action of the Privy Council to excuse the profession for refusing to concern itself further about the progress of this horrible epidemic. But we implore medical men not to yield to this feeling, and to do all in their power to encourage vaccination and revaccination, and to perform both of these operations thoroughly. The profession must take some blame to itself for not having vaccinated thoroughly, and for having too readily yielded to the desire to please ignorant parents by vaccinating in an imperfect way. The evidence accumulates that the more the eruption of vaccinia the more the protection from variola, and *vice versâ*. People unvaccinated have died in this epidemic in the ratio of 51 per cent.; people with five or more marks in that of 6 per cent. No revaccinated nurse has had the disease. Mr. FURLEY declares that even after the appearance of the eruption of small-pox the copious injection of vaccine lymph —not mere nominal vaccination—aborts and arrests the disease. This experience requires confirmation. But the evidence that vaccination is effective in proportion to its quantity is overpowering. And yet there are practitioners who content themselves with producing one vesicle, and saying that that is as good as ten; or with revaccinating a patient, and, on getting no result, take no more trouble, and tell the patient that, being insusceptible to vaccination, he is proof against small-pox.

Next, we may ask if the State means to look on passively at the epidemic and do nothing more? Ignorant as the people are and easily influenced by the perfectly irrational and unprincipled language of antivaccination stumpers, we believe that a few intelligent public teachers could demonstrate the advantages of vaccination and revaccination, and do immense good. We see nothing undignified in the idea of a medical Inspector explaining vaccination to the public in panic-stricken towns as he does to the representatives of the public in boards of guardians, town councils, &c. By the way, we may here say that it appears to us the number and pay of Inspectors of Vaccination are insufficient and inconsistent with such a critical inspection of the work of public vaccinators as is necessary. Should revaccination be made compulsory? This is a difficult question. But it is very difficult to give a negative answer to it. If it is right to compel primary vaccination, and if the virtue of vaccination tends to wear out, then it is impossible to deny that revaccination should be required. The liberty to have small-pox is so much prized that there would be many law-breakers, but these should not have any longer the sanction of law in neglecting a precaution so urgent and so splendidly efficient. Short of compelling revaccination, it would at any rate be worth while to consider whether the age for the operation should not be fixed earlier than at twelve.

Without waiting for the further action of the State, employers of labour, schoolmasters, and clergymen can all do very much to encourage those whom they influence to be vaccinated. In Cork the firm of Sir JOHN ARNOTT and Co. have set a good example in supplying the dispensary doctors with the names and addresses of all their men, and requiring their men to give instant notice to the officer of the district and to submit entirely to his instructions, on pain of dismissal in case of their not doing so. It may seem hard to compel men to take such precautions in these liberal days, but it is like compelling the use of a fire-escape in case of a conflagration.

THE recent raid of the Charity Organisation Society upon the out-patient departments of hospitals may be taken as a forerunner of the time when public opinion will no longer sanction the continuance of the existing system.

At present, at most hospitals, the attendance of numerous out-patients is promoted by the management, and is urged as constituting an additional claim upon the purses of the benevolent. In order that it may really do so, certain essentials should be carefully provided for. In the first instance the numerical relation between doctors and patients should be such that the ailments of the latter may be carefully investigated and judiciously treated, and that no prescriber may be overwhelmed by an amount of work which it is impossible for him to accomplish. Secondly, the circumstances of the patients should be such that, on the one hand, no private practitioner is defrauded by their attendance, and, on the other, that the medicines of the hospital may not be wasted on persons who are unable to procure food, warmth, shelter, or other necessaries to recovery or improvement. Within the limits thus defined there is good and useful work to be done; but, as soon as these limits are transgressed, the so-called charity is apt to become little more than a delusion and a snare.

The crowded state of many out-patient departments becomes every year more conspicuously an evil, in proportion as the advances of pathology and the increase of knowledge bring more and more into relief the immense importance of mere ailments. A generation ago, to suffer from an occasional ailment was regarded by physicians as almost the normal state of mankind, and was thought to indicate no more than some functional derangement, trivial in its nature, and easily corrected by an emetic or a purgative. It was commonly held that, under the use of such means, the tendency of ailments was to disappear entirely, leaving no trace behind.

At the present time, however, it would not be too much to say that most scientific physicians regard ailments in a very different light, and consider them, even when not the absolute forerunners of disease, as being at least indications of the quarter in which disease is to be looked for—signs of the direction of the individual tendency to death. Few illustrations of this are more remarkable than the position among the neuroses now assigned to migraine, the "sick headache" of our immediate predecessors; or than the sketch drawn by Sir W. GULL of the slight and insidious character of the premonitions of Bright's disease. Dr. HOOD, in his "Treatise on Gout and Rheumatism," observes that "the best possible evidence of skill and tact on the part of a medical practitioner is afforded by the comparative immunity of his habitual patients from severe and dangerous illnesses"; or, in other words, that the study and treatment of ailments is the most important part of a physician's business. If this be so, and we imagine few could be found to dispute the proposition, it follows that a properly organised out-patient department should form one of the most essential features of a good medical school; and that when students have learned to recognise the broad outlines and coarse features of disease in the wards, they should go next among the out-patients, and learn to recognise the oftentimes hidden meanings of slight maladies. It is quite impossible for them to do this, or for any endeavour to be made to teach them to do it, where the out-patient department is permitted to be so overcrowded that the assistant staff cannot enter into fine details of diagnosis, or prescribe, except from the formulæ ready to hand in the hospital pharmacopœia. The elimination of well-to-do patients and of mere paupers serves at least the purpose of diminishing the total mass of sickness that is to be dealt with; but the ultimate limit must, after all, be a numerical one, and must be fixed with reference to the number of cases that a single physician can be expected to examine with advantage. At St. George's Hospital a reasonable rule is enforced. There the number of new cases seen by any single assistant-physician or assistant-surgeon is limited to twenty each day; and the twenty are selected from all the applicants in such a manner as to admit the cases most likely to derive benefit, and to exclude alike the very poor and the well-to-do. For the especial benefit of the latter the assistance of the Charity Organisation Society is occasionally invoked.

Hospital reformers look for a future when the out-patient departments will be almost superseded by parochial or by provident dispensaries; but the principal difficulty in the way of fulfilling this desire arises from the circumstance that several generations of practitioners have now been trained under the present system. When men get into practice, they, or at least some of them, learn the truth, and look carefully after the beginnings of evil. But young men, as a rule, have their heads too full of the diseases that kill quickly to take proper note of the precursory symptoms of the diseases that kill slowly. Some years of well arranged out-patient work at hospitals, properly utilised for teaching purposes, would turn out young men better fitted than the majority of present students to take charge of provident dispensaries and to carry them to a successful issue. The task of such dispensaries should, we take it, be largely one of prevention, based upon the early recognition and the prompt treatment of the beginnings of chronic disease. The men who pass our examining boards would require, in most cases, to enter upon a course of self-education before they could undertake such duties; and the Medical Council, if its supervision of education were a reality, should strive to direct attention to this much neglected field of professional labour, and to show how it might be cultivated to the greatest possible advantage.

Medical Annotations.

"Ne quid nimis."

HEALTH OF COTTON-WEAVERS.

TWENTY years ago the so-called sizing of cotton consisted in using fermented flour and tallow to give tenacity to the warp and to lessen friction in the weaving process. Thereafter it came to be seen that the brownish colour given to cotton cloths by size made from inferior kinds of flour could be reduced by adding a little china clay to the size; while this material so far reduced the glutinous quality of the flour that the sized warps would weave easily with less tallow in the size. With the increased price of tallow in the Crimean War, china clay came to be still further substituted; the practice grew more and more general till the cotton famine of 1862 brought into use the poorer short-fibred cotton, which demands a larger amount of size than the better sorts. Another practice was introduced by the lack

of cotton. "Weight for length" being the chief test of the goodness of yard-wide cloth, a fictitious weight was given to cloths containing less cotton, to make it appear that they contained more; "heavy sizing" became the custom, and for this purpose a size, composed mainly of flour and tallow, with the addition of Epsom salts, chloride of magnesium, sulphate and chloride of zinc, was resorted to. In weaving warps of inferior cotton, weighted with china clay and flour mixed with deliquescent salts, the weaving-sheds must be kept damp, to prevent the brittle compound of clay, flour, and cotton from breaking, and increasing the weight of the cloth by the retained moisture. A mean of 62° Fahr., the external temperature being at 48° Fahr., with an excess of moisture and a careful avoidance of any draught that could dry the tender warp, were the conditions of work in the weaving-sheds, and were found so deleterious that the weavers addressed a remonstrance to the Privy Council. Dr. Buchanan was accordingly told off to investigate the matter, and found in thirteen sheds a haze caused by fine dust-particles. The looms were in all cases covered with opaque dust, depending as to quantity on the kind of cloth that was being made. The clothes and hair of the weavers were white with dust, causing an intense irritation to the nose and in a less degree to the eyes and throat—an irritation to which the weavers get accustomed, though at the expense of their lungs. To judge of the effects of this mode of life on the weavers, Dr. Buchanan first examined the mortality statistics, next collected the local medical opinions, and finally made personal examination of the weavers themselves. In Todmorden, for example, Dr. Buchanan found that there was a considerable excess in the death-rate from lung diseases among persons over fifty-five years of age. All the medical men concurred that lung diseases were greatly prevalent owing to the cotton manufacture, that the cotton-worker bequeaths a consumptive habit to his progeny, and that dyspepsia is another ailment peculiar to those people. With some little divergence of opinion, the local practitioners agreed that the lungs of weavers suffered more now than formerly, and that they were approximating to carders in their liability to chest complaints. The weavers themselves were positive as to their incurring shortness of breath, emphysema, bronchitis, subacute dyspepsia, and permanent epistaxis from the conditions they lived under—diseases which disappeared or were relieved by cessation from work. "Fewer weavers now pass middle age without getting something the matter with their lungs," was the remark of an intelligent overlooker to Dr. Buchanan. Experience tells that the diseases due to dusty occupations are not rapidly fatal. "During the years that their victims are only disabled no record is kept of their prevalence. When at last," says Dr. Buchanan, "they kill, perhaps after having driven the worker to some other occupation, and having made his life miserable for ten or twenty years, then for the first time they get registered." To arrest the increase in the already excessive and heightened mortality in the cotton-working community, important changes in the practice of sizing, or in other ways, must be introduced; and we hope the Local Government Board will lose no time in acting on the suggestions submitted to it by Dr. Buchanan.

DR. PETTIGREW ON CIRCULATION.

DR. PETTIGREW delivered his fourth lecture on "The Physiology of the Circulation in Plants, in the Lower Animals, and in Man," on the 21st ult. The lecturer recapitulated at considerable length the structure and forces engaged in the circulation of plants. The interlacing and alternating syphon tubes through which the nutritious juices pass in plants, he explained, differed from ordinary syphons in this, that they were capillary and had porous walls—that is, walls which permitted fluids to pass through them either from without or from within (as in absorption and evaporation), but effectually prevented air entering from without, which would destroy their syphon action. He illustrated this by bending a glass tube upon itself several times to form a compound syphon, the extremities of the syphon being directed in opposite directions, like a number of s's united together. He then perforated the syphon so constructed in several places, and covered the apertures with a portion of vegetable or animal membrane, through which evaporation or absorption could go on, but which effectually prevented the entrance of air from without. This novel form of syphon, he explained, corresponded in its details to the syphon formed by the vessels and intervascular spaces found in the higher plants. By its aid he was enabled to show that evaporation might go on at one point, say in the leaf, and absorption at another, say in the root (or the converse)—evaporation drawing up the current in the vessel or intervascular space, and acting as a *vis a fronte*, absorption and endosmose pushing up the current in the same vessel or intervascular space, and acting as a *vis a tergo*. (The heart also possesses this *pulling* and *pushing* power.) He thus proved that the condition of *dryness* and *wetness* can be made to influence the circulation, the two forces working in the same direction. He also pointed out that when either moisture or dry air is applied to the leaves or roots of a tree, it facilitates the circulation so long as the tree contains tenacious juices, the dry air in seasons of drought *drawing* the juices out of the tree in opposite directions by evaporation, the moisture in wet seasons *pushing* juices into the tree in opposite directions by absorption and endosmose. The lecturer proceeded to explain that evaporation and absorption enabled fluids to invade and pass through the tissues, these being nourished and washed out at the same time. He stated that precisely the same thing happened in the animal tissues; that the tissues of an animal had a circulation of their own, apart from the general circulation, over which the heart presides—the heart being an engine provided for conveying the blood long distances, and in this sense only an auxiliary of the circulation. His remarks under this head were particularly interesting. He observed—

"It is an error to suppose that the circulation in animals is carried on exclusively by the heart. The tissues do their own work, or rather the particles of the tissues are so arranged that they permit certain physical forces, such as capillary attraction, osmosis, evaporation, respiration, chemical affinity, &c., to do the work for them. The organic kingdom avails itself of inorganic power. The capillary vessels of animals form syphon loops, as in plants, the animal syphon loops being porous in the same sense in which the vegetable ones are. They are therefore capable of transmitting a continuous stream of fluid in a given direction, and of absorbing and evaporating at innumerable points, the absorption and evaporation facilitating instead of retarding the general circulation. That the tissues respire has been abundantly proved by Spallanzani. He finds that all the tissues take in oxygen and give off carbonic acid precisely as the lungs do; so that animals (and plants) breathe at every pore; this universal respiration contributing to the general circulation. That the tissues effect the circulation within themselves is proved by the fact that the circulation within them continues so long as they live and maintain their temperature—that is, after the heart has ceased to beat and the body is to all intents and purposes dead."

The lecturer next proceeded to show that there was no such thing as absolute rest in the universe, and that there was what is equivalent to a circulation in metals, Seebeck having shown "that when dissimilar metals are made to

touch, or are soldered together and heated at the point of contact, a current of electricity flows through the metals employed, which current continues as long as an *increasing* temperature is gradually pervading the metals, ceases when the temperature is *stationary*, and flows in a contrary direction with the *decrement* of temperature." This afforded him an opportunity of explaining that, in order to understand the movements of the heart, it is necessary to understand the movements of its ultimate particles. He concluded by introducing his audience to the circulation as it exists in the lower animals, this forming the subject of his next lecture. The lecture was illustrated by a large number of diagrams and experiments.

THE TRUTH ABOUT PESHAWUR.

A YEAR never passes without public attention being directed to this military station, so disastrous are its effects on those doomed to reside there. The valley of Peshawur, about one hundred miles long and fifty broad, has even been nicknamed "the valley of death." The city of Peshawur, like so many large Eastern towns, may be described as being composed of many cities superimposed upon one another, for the structures of the present rest upon the *débris* of the past. It is filthy in the extreme, and its water-supply is fouled in ways that would be intolerable in any civilised community. The insanitary condition of Peshawur is a standing danger to the health of the residents, and the political elements which the city contains are no less dangerous to the stability of the Government, for refugees, *revolutionaires*, and political Adullamites from the hills find shelter within its walls. For this reason, and for the fact that the geographical position of Peshawur is one of much strategical importance, it is considered dangerous to trust its protection to a native army, and a European force has, consequently, to be maintained there, consisting at the present time of about 2000 men. The great enemy to be feared at Peshawur, and one which may be said to be always present, is malaria, with its congeners, fever and dysentery. Moreover, epidemics of cholera of a very fatal character occasionally make their appearance. Soldiers have sometimes been seized with symptoms of collapse mimicking the collapse of Asiatic cholera, so intense at times is the action of malaria. Military surgeons who have had practical acquaintance with Peshawur consider that the presence of malaria is to be accounted for by the topographical peculiarities of this station, the damp undrained condition of its subsoil, and the sudden changes of temperature of its climate. As regards the water-supply, the European troops are mainly provided with water for potable purposes from wells, and it is believed to be of good quality; but the natives procure their supply from the fouled river Bara. The Government of India has lately sanctioned a grant of money for the purpose of drawing the water off at the head stream of this river. Unfortunately, the sickness and mortality among European soldiers, large as they are during the hot season, afford no fair criterion of the evils of the climate, for the soldier who has contracted Peshawur fever remains long afterwards so damaged in constitution as to absolutely require change of climate to Europe for the thorough restoration of his health. The physical deterioration is occasionally so marked that, as we have heard it said, a regiment after it has been quartered for any time at Peshawur does not look as if it were composed of the same men.

Seeing that a European garrison at Peshawur is held, on strategical grounds, to be necessary, it may be asked, Can nothing be done to mitigate these evils? We think so. In the first place, it is practicable to diminish the strength of the force by increasing the strength of the fortress, and the fort already partially built should be at once completed. The Government has conceded that the neighbouring and elevated station of Cherat shall be occupied by troops during the sickly season, and there is no doubt that the hills should be utilised as far as practicable for European soldiers. As soon as railways have been pushed onwards to the north-western frontier, we shall be able to concentrate a force with relative rapidity on any given point, and there will no longer be any necessity for maintaining a large force at Peshawur. In the meantime every effort should be made to remedy the present disgraceful and dangerous state of things there by securing that the residents are guarded against the effects of filthy water and bad drainage. Pollution of the water-supply must inevitably result from the arrangements recently described by Dr. G. E. Morton. The closure of some cesspits, and the diversion of a stream from the immediate vicinity of latrines, surely ought not to prove a difficult or an expensive undertaking.

THE LONDON WATER-SUPPLY.

NOT long since we had occasion to notice the appearance of a Parliamentary paper embodying some criticisms by the Water Examiner to the Board of Trade upon Dr. Frankland's Reports to the Registrar-General relative to the quality of the London water-supply, and we then remarked that it was desirable to hear the other side of the story before arriving at any conclusion as to the merits of the case. The Rivers Pollution Commission (of which Dr. Frankland is a member) having been implicated in the controversy, the Secretary of that Commission has addressed a letter to the Board of Trade, in which the following charges are brought against the Water Examiner:—That in impugning the accuracy of Dr. Frankland's Reports he "has misrepresented the analytical numbers contained in them"; that he has "misrepresented" a portion of a memorandum issued by the Commissioners defining "dangerous water" as distinguished from "reasonably safe water"; that he has made use of the process of dissipation by heat which has "long been abandoned by chemists as utterly worthless"; that "he has shown his limited acquaintance with physics and chemistry, and consequent misunderstanding of chemical language and results"; and that he did not take the "proper course" of putting himself in communication with the Commission "before using their experimental data and conclusions in a mutilated form to support his own opinions." To this the Water Examiner has replied: (1) that he had no intention to impugn the accuracy of Dr. Frankland's reports, whilst he admits having "inadvertently committed an error in calculating out Dr. Frankland's quantities"; (2) that as a proof that the process of dissipation by heat has not been abandoned by *all* chemists, he encloses an extract from the report of the medical officer of health for Marylebone, wherein that process has been used; (3) that he fails to see in what way he has either misrepresented or mutilated the memorandum of the Rivers Commission; and (4) that he did not put himself into communication with the Commission because he had received no instructions to do so. And here the dispute, so far as public knowledge of it goes, rests for the present.

Now we take leave to say that this spectacle of two public officials thus exhibited in Parliamentary papers as pulling one against another, instead of acting in concert for the protection of the important interests of the three million water-consumers of London, which is what their proper function is understood to mean, is not edifying, and ought not to be permitted at any further length. So far as it has gone, it has simply deepened our conviction that it was a

mistake that the Metropolis Water Act of last session did not entirely dissociate the Board of Trade from having anything to do with the London water-supply; and that all Government intervention or supervision on behalf of the consumers ought to be exercised exclusively by the Public Health Department.

THE TOBACCO CONTROVERSY.

NOTWITHSTANDING the counterblasts of kings in the past and the tirades of the anti-tobaccoites in the present, people refuse to listen to those who pipe to a perverse generation from the lower rooms of Exeter Hall. Go where you will, at home or abroad, and more abroad than at home, people will smoke. From Napoleon and Bismark down to the private soldier and labourer, they consume tobacco in some form or other. The members of the Anti-tobacco Society have a sorry time of it. If they have not striven to enlarge their minds by travel, they can scarcely have avoided an occasional railway journey. The establishment of a system of "smoking carriages" on our lines of rail must have seemed to them a sign of our rapid national decay. The fumes of tobacco have, from their standpoint, assumed the proportions of the cloud of smoke that arose out of the fisherman's vase in the "Arabian Nights"; for the chairman of the Society declared that "the practice of smoking hung like a gigantic cloud of evil over the country." And he went on to attribute so many terrible diseases to the same practice that we almost wonder there are any smokers left to occupy the carriages set apart for them on railways. We are far from denying that tobacco-smoking has its evils; but this kind of exaggeration defeats itself. It is very unwise to seize upon a cheap pleasure and label it with a bad name. Common-sense individuals laugh at those who do so; and, what is worse, some people come to regard those who oppose practices that are really dangerous and degrading as so many prigs given to canting. Now, tobacco-smoking is no doubt injurious to the young, and we would counsel them not to commence it. To all constitutions it is hurtful when used in excess; and to many constitutions it is injurious in any quantity, however small. It is occasionally, no doubt, productive of dyspepsia, muscular tremors, and nervous palpitation, and it is apt to induce habits of listlessness and dreamy indolence; but, take it as a whole, tobacco-smoking is, nevertheless, to many people an innocent gratification enough. Let us allow that it is an unnecessary, often a selfish, and occasionally an injurious practice; but, to the poor man, working hard and living hard at the same time—to the soldier, fatigued, cold, and ill-fed during a campaign—tobacco is, we believe, both useful and comforting. It soothes some excitable men, and enables many another to concentrate his attention on subjects requiring thought. If the tobacco be the poison that its enemies declare it to be, it is eminently slow in its action, for every workhouse, lunatic asylum, and charitable institution has its grey-haired votaries to the pipe.

VACCINATION IN SCOTLAND.

THE Seventh Annual Report of the Scotch Registrar-General upon the working of the Vaccination Act in respect of children born in the year 1870, shows that 88·2 per cent. of such children were successfully vaccinated, 8·4 per cent. having died before the operation could be performed, and 2·2 per cent. having escaped observation by removal to other localities. Striking off the numbers dying before the vaccinal period and the postponed cases, it seems that the benefits of the Act were experienced by 97·8 per cent. of all subjects fit for vaccination, and that consequently little more than 2 per cent. actually escape its provisions. The Registrar-General adheres to the opinion, which has been repeatedly expressed in these reports, that the statutory period of six months ought to be reduced to four or even three months, in order to diminish the number of children who now escape vaccination in consequence of the migratory habits of their parents; and this view seems also to be generally entertained by the medical men and registrars. The Act has now been in force eight years, during which period the average annual deaths from small-pox have been 551, as compared with an average of 978 during the nine years preceding the Act. It would be as absurd not to recognise cause and effect in results like these as it is to say that vaccination is useless because small-pox prevailed epidemically in Scotland last year. There is ample scope for the disease amongst the unprotected part of the community represented by the gradual accumulation of the 2¼ per cent. of children who every year escape vaccination, in addition to the living who were born prior to the passing of the Act and have never voluntarily accepted vaccination. There is no provision for adult vaccination or for revaccination in the Act. "It is fortunate," says the Registrar-General, "that in Scotland there does not exist much of that prejudice which in England interferes with the practice of vaccination." We envy our northern professional brethren their immunity from the wild outpourings of the "League," which afflict us so often with stories of "alleged violation of the liberty of the subject," and of "martyrs amerced in small sums by which they virtually purchase the privilege of saving their offspring from the imaginary horrors of cow-pox." The notes supplied by the local registrars relative to the working of the Act in the several districts of Scotland confirm the opinion which Dr. Seaton expressed before the Vaccination Committee last year, that the Scotch Act was "rather a hard Act"; there is no gratuitous vaccination at all except for paupers; and few will deny that it does seem "hard" that a poor man's wife should have to walk with her child a distance of 23 miles to meet the vaccinator, as is recorded in one case in these notes.

THE THREATENED INTRODUCTION OF SMALL-POX INTO NEW ZEALAND.

WE are glad to learn from a correspondent that small-pox did not make its way on shore at Wellington, on the late arrival of the *England* at that place. As we recently reported, this vessel was discovered to be flying a yellow flag on its arrival, in consequence of having had sixteen deaths from small-pox on board during the voyage, and the seventeenth occurred after her arrival; but measures were promptly taken under the direction of the colonial surgeon for accommodating the crew and passengers on an island in the harbour, distant a "good two hours' hard row" from the town. As might be expected, the people at Wellington were extremely anxious to avert this threatened invasion of small-pox, especially as they have never yet had that disease amongst them, although similarly threatened some three years back; and up to the departure of the mail, the sick on board the *England* were all convalescent, and no fresh cases had broken out. We have, therefore, grounds for hoping that the disease may not make its appearance on shore. We need not point out that the greatest possible precautions should be taken in guarding against the introduction of contagious diseases by emigrant vessels in this way. The inspection of a ship crowded with Scandinavians, or any other emigrants, ought to be of the most searching character; and in the case of a three months' voyage, where it is very possible that some of the emigrants may have embarked during the incubative stage of infectious diseases, regulations as to the best method of

procedure should be clearly laid down for the guidance of those in authority, in the event of such diseases manifesting themselves during the voyage. The exercise of foresight and common sense in these respects might avert a very serious epidemic on shipboard, and, what is more, the introduction of a frightful disease into a locality where it had hitherto been unknown.

CHINCHONA CULTIVATION IN INDIA.

THE Report on the Government Chinchona Plantation for 1870-71 gives satisfactory accounts of the growth of the plants. From shrubs, the older plants of the several medical kinds have grown into trees 22 ft. or 23 ft. high, and 18 in. to 21 in. in girth. The Chinchona succirubra, in its finest specimens, reaches a height of 30 ft., with a girth of 3 ft. Of the Calisaya variety, 3500 plants have been permanently planted out on two acres of new land. The Pitayo bark, among the new species of plants lately introduced, seems hardy and suited to the climate. During the year 51,353 lb. of fresh bark were supplied to Mr. Broughton, the Government quinologist, for the manufacture of amorphous quinine; while 1560 lb. have been extracted from 1000 eight-year-old plants in the course of the year. A clear profit of one rupee per pound will, at the present rate of 2s. 8d. per 2lb., be yielded by this average of 2½ lb. to each tree. Increasing profits may be yearly expected with a steady improvement in the quality of the bark; but in the home market it is unlikely that India will ever compete in the cheaper kinds of bark, with America, where the plant grows wild. In the finer kinds, however, a successful competition is far from improbable, if the mossing process be steadily applied. Under this process each successive renewal of bark becomes more valuable than the last, until red bark yields 12 per cent. of crystallisable alkaloids containing 8 per cent. of pure quinine; while 10 per cent. of the latter may be expected from the coarser barks, of which no such specimen is found in America.

POOR-LAW DISPENSARIES.

WITH the exception of Fulham, Lewisham, and Hampstead, the metropolis is now, or will very soon be, supplied with Poor-law dispensaries. In the place of twenty-three in work last year, there are now thirty-seven, and thirteen more are either contemplated or in course of construction. Mr. Stansfeld expresses his satisfaction with the working of this great reform, which we would remind him was forced upon the department over which he presides. It is quite clear that the effect has been beneficial to all parties. The poor have no reasonable excuse for haunting the out-patient rooms of hospitals; they can now avail themselves of an institution were the medical officer has his sense of duty and responsibility heightened by publicity, whilst his hands are not tied by any considerations of self-interest, the drugs being provided at the public cost. The records afford valuable indications to the medical officers of health, and in many districts there has been a decided decrease in the number of patients. Not the least advantage to the poor is the security they now have of the personal attendance of the medical officer. We hope that Mr. Stansfeld will be convinced that these advantages of the dispensary system are equally required in country districts, where too often the inadequacy of the salaries, and the widely extended areas, lead to the neglect of sickness and the employment of apprentices and unqualified assistants; whilst the distances which have to be traversed make it all but impossible for the poor to obtain prompt assistance. To give a case in point:—Small-pox is now excessively rife in the outlying villages of the Northampton Union, and particularly in the village of Kingsthorpe. It may and does happen that a sick person would have to send five miles for an order, and the bearer would have to take it five miles to the medical officer, who would have to go two miles to the patient. When seen the patient would have again to send to the surgery, two miles away, for medicine. So that altogether the messenger would probably travel a distance of eighteen miles before the patient obtained efficient treatment. Whereas, if there were a dispensary in the village, and the medical officer went there regularly at a certain hour, it would be easy to authorise the overseer to give an order in cases of emergency, and the patient would be seen and prescribed for on the spot. The relieving officer visits this village three times a week, and the room he now uses would also do for the dispensary, although it is totally inadequate as a vaccination station, the joint purpose to which it is now applied.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

A VERY large muster of Fellows took place on Tuesday, the 28th ult., on the occasion of the last meeting of the session, to hear and discuss a paper communicated by Sir William Gull, Bart., and Dr. H. G. Sutton on the Pathology of the Morbid State commonly called Chronic Bright's Disease with Contracted Kidney. The communication, which occupied about fifty minutes in delivery, was most carefully and industriously prepared, and was illustrated by numerous diagrams. As the paper and the discussion will be fully reported in our columns, it is only necessary to indicate that exceptions were taken to the views of Dr. George Johnson on that important subject, and that Dr. Johnson, anticipating a discussion, had brought his own microscopic preparations, which were exhibited and referred to. Dr. Broadbent, Dr. Anstie, Mr. Brudenell Carter, Dr. Rutherford, Dr. Silver, Dr. Symes Thompson, and Mr. Hulke also took part in the discussion. Sir William Gull and Dr. Sutton replied, and the former remarked, with emphasis, that microscopic specimens illustrating the views of the authors of the paper would be exhibited at the forthcoming conversazione of the Society on the 7th inst. Mr. John Wood exhibited a patient in whom he had transplanted skin from the abdomen on to a large raw surface caused by a severe burn of the forearm.

PHILADELPHIA DEGREES.

A CORRESPONDENT of the *Glasgow Herald* says he is informed that, although the Philadelphia colleges have been *rouped*—by which, we presume, he means deprived by the State Legislature of the power of granting degrees which they have so shamefully abused—some enterprising speculators are going to carry on the business—the trade in Dollar Doctorates. He suggests that every man holding a degree should state in writing his title, and name the university or college from which it has been received. There are objections to this—amongst others, that it would take more time and space. But if this traffic in titles is not ended, some such practice will have to be introduced. It is lamentable to think of the extent to which it has gone, as showing the number of men, many of them ministers of religion, so anxious to have an "outward adorning" that they have not been above receiving these degrees for money from the most doubtful quarters. What is to be thought of a moral teacher who will use such a degree as an ornament to his name, though he knows that it has been obtained without the intervention of the slightest test of merit, and for a money consideration, from men who were never heard of either in the moral or the literary world.

IMPROVEMENTS IN WORKHOUSE INFIRMARIES, SCHOOLS, &c.

IT is a source of unmixed satisfaction to observe the great change which has been brought about in the treatment of the sick poor since public attention was drawn to the subject by the Commissioners of this journal. In nothing is this change more manifest than in the expenditure on the improvement of workhouse infirmaries, schools, dispensaries, &c. Since 1865, the date of our reports, nearly four millions and a half have been expended in this direction, or nearly as much as the workhouses of the whole country had cost for their erection and improvement during thirty years. Nor has the progress of improvement yet ceased. In every part of the metropolis more infirmaries are in contemplation or in course of erection, whilst the impulse has extended to the country generally, there being no county in which expenditure with this object has not been made.

The improvement of the accommodation is, however, the least gratifying feature. The furniture administration, removing, &c., are all far more satisfactory than formerly. In place of buckets we find washbasins, and it is now quite exceptional to miss hairbrushes, towels, and looking-glasses in the wards; in fact, many of our workhouse hospitals are quite equal to some of the charitable institutions. We believe that humanity and economy will in the case of the sick be found in harmony, and that the country will reap the advantage in a higher standard of public health.

MEDICO-NAUTICAL NOTES.

A LARGE Russian vessel arrived at Falmouth some few days ago and landed ten seamen in a helpless state from scurvy. This ship was found somewhere in the latitude of the Western Islands by Messrs. Green's ship *Clarence*, drifting about and evidently unmanageable. Captain Gibson, the master of the *Clarence*, boarded her with Dr. Wheeler, his medical officer, and found more than two-thirds of the crew prostrate. He left with them a quantity of provisions and medical stores, and sent two of his own men on board to assist in the navigation of the ship. Russian vessels have no systematic arrangements as to antiscorbutics, and it appears that the quality as well as quantity of their provisions were in this case lamentably deficient.

Yellow fever is still raging at Pernambuco, and reports are appearing daily in the columns of the *Shipping Gazette* as to deaths of British seamen on board vessels lying in the port. The crew of the *Abbie Clifford*, of Stockton-on-Tees, lost nearly all her hands from yellow fever between Pernambuco and New York, and was navigated between those ports by the wife of the captain, who alone, among the survivors, knew anything of navigation.

LIBRARIES AND SMALL-POX.

SOME time since we pointed out the necessity for some precautions against the circulation of small-pox and other infectious diseases through the medium of the books of a public library. That this danger is a real one cannot be doubted. In Leicester, in consequence of the prevalence of the disease, persons at whose dwellings it exists have been officially requested to refrain from borrowing books from the Free Library, and those who hold books have been requested to return them to the disinfectant-office, instead of to the library. It would be reasonable to go further than this, and require a certificate of all persons taking books that there is no infectious disease in their house. Such a form of certificate might be very short and simple. Convalescents from such diseases are apt to be very selfish in the matter of books, and to think that as they are shut out from communication with the world they may at any rate have intercourse with authors, especially popular ones; and so diseases spread, though often to the great puzzle of both the people who are circulating and those who are catching them.

THE QUEEN'S HEALTH.

HER MAJESTY has, happily, been able to be so much amongst her people during the past portion of the season as to explain the report that she is so much stronger that, on her return from the north, she will undertake more public duties. There is, however, no foundation for this report. The occasions on which Her Majesty appeared in public during the past spring were both numerous and trying, and the fatigue consequent on these, following so soon after Her Majesty's own very severe illness and the anxious watching over the Prince of Wales, necessitates a long period of quietude. Much public exertion during the ensuing summer months would probably induce a return of the painful illness from which Her Majesty suffered last autumn.

THE CLINICAL SOCIETY.

THE last meeting of the session was held on the 24th ult. under the presidency of Sir William Gull, Bart., and was numerously attended. Dr. Broadbent, Dr. Andrew, Mr Thomas Smith, and Mr. Mac Cormac read notes of cases, and the papers of the two surgeons, both on gastrotomy, excited an interesting discussion. The retrospect of the session is, on the whole, satisfactory. A great deal of really good work has been done in the bringing forward and discussion of many classes of cases met with constantly in general practice, and of fewer of those examples of disease which we all read about but very seldom see. Sir William Gull has very properly, during his term of office, endeavoured to direct the attention of the Society to one of the chief aims of its existence—skill and accuracy in diagnosis. The members of a Clinical Society should always keep this object primarily in view. The President remarked that Dr. Cockle's patient, whose left carotid artery Mr. Christopher Heath tied for the relief of aneurism of the aorta, was now in the Royal Free Hospital, and progressing favourably.

CHOLERA.

MEDINA has received a severe visitation of cholera; 1800 fatal cases being reported among the resident population; while the caravan of 4000 pilgrims which arrived there from Mecca on the 10th of March, sustained a loss of 400 lives during its transit, which occupied a fortnight. By the latest account there were 20,000 pilgrims at Medina, and the Egyptian sanitary authorities were enforcing strict quarantine regulations on all vessels and caravans. Mecca is now said to be almost free from cholera.

MEDICAL QUALIFICATIONS IN JAMAICA.

AT the present moment only the holders of British diplomas recognised by the Medical Council are entitled to register or to practise medicine in Jamaica. Those holding any other diplomas must pass an examination before a Board constituted under a local Act. But a Bill is now before the Legislative Council the design of which is to legalise all Canadian qualifications, and all qualifications *recognised* by Canada. A petition has been presented to the Legislative Council praying that the passage of this Bill may be stayed until the opinion of the medical practitioners of the island is ascertained as to the justice and policy of it. This petition is a reasonable one. It would be well to give

the Medical Board power to recognise only such degrees and diplomas as seem to imply an amount of medical knowledge equivalent to that implied in the possession of British qualifications. It is in the interest of the public, as well as of medical men, that the medical profession, as recognised by the law, should consist only of those who have given proofs of a fair amount of medical and surgical knowledge.

THE COLLEGE OF SURGEONS.

A SPECIAL meeting of the Council of the College of Surgeons was held on Tuesday last for the consideration of the recommendations of the Conjoint Committee of the Royal College of Physicians of London and the Royal College of Surgeons of England, on the mode of carrying out the scheme for an Examining Board for England. This scheme embraces four distinct heads—viz.: 1. The Committee of Reference. 2. The Board of Examiners. 3. The subjects of study. 4. The examinations. Each of these headings has necessarily been subdivided; and, as the Council was unable at its recent meeting to discuss the details of all of them, we think it better to defer all reference to them until after the next meeting of the Council.

THE MEDICAL OFFICER OF HEALTH FOR GLASGOW.

WE regret exceedingly to find that a sub-committee of the Glasgow Police Board, to which the consideration of the constitution of the sanitary staff was referred, have agreed to report in favour of appointing a medical officer who will forego private practice and devote his whole time to the duties at £600 a year. This will, of course, involve the loss of Dr. Gairdner's services. These are not the times for a city like Glasgow to part with a tried and very earnest officer, whose opinions have always been received with great respect by the profession. It is unlikely that any officer of equal value can be had on the conditions specified. And we still venture to hope that the Police Board will refuse to comply with the report of its sub-committee.

DEATH FROM MORPHIA.

A FEW days ago a commission agent in Sunderland, once a chemist, died in about eight hours after drinking ale in which he had mixed a white powder—morphia. He seems to have gone into a public-house and taken three glasses with almost two grains of morphia in each. The evidence went to show that the deceased used to take laudanum years ago, used to smoke very much, and that he was tipsy the night before his death. Mr. Mordey Douglas said that the deceased used to take morphia to stimulate himself. The coroner said he had no doubt a great many persons took it in another form in Sunderland. So much the worse for Sunderland. The indulgent jury, however, took a lenient view of the case, and found that the deceased had died accidentally from an overdose of morphia which he had taken inadvertently, and not intentionally. Juries are fast bringing thinking people to question the value of their inquiries.

AN official report on the neglect of the vestry of Horsford, near Leeds, to provide sewers, has been made by Mr. Morgan, inspector of the Local Government Board, on the instigation of a gentleman named Mayall. Mr. Morgan reports that the default of the vestry has been fully proved, and that the greatest indifference has been shown by that authority to the numerous complaints which have been made at various times for the removal of offensive nuisances. As the vestry still refuse to act, it is proposed to place the district under a local board.

THE Committee of the Liverpool Dispensaries having made an application to the select vestry for a grant of public money, the vestry have resolved that they are not, under present circumstances, prepared to recommend grants from the poor-rates to medical charities in general. We are of opinion that they are quite right. The select vestry employ an excellent staff of medical officers, and provide the drugs; in fact, no really destitute person finds any difficulty in obtaining gratuitous medical assistance. The dispensaries would do better to make their appeal to the class just above pauperism, and we have no doubt that if the provident system were introduced the working classes would respond to the appeal. Besides, it is a far nobler work for the dispensaries' committee to raise the standard of independence than to depress it by their present gratuitous and indiscriminate charity.

THE Sanitary Committee of Bradford have resolved to reorganise the sanitary staff. The town is to be divided into districts, for the purpose of getting the privies and ash-pits emptied regularly, not less than once a month. There is to be an inspector of meat, &c., and three sub-inspectors are to be placed under the chief inspector. We hear nothing of a medical officer of health, or of arrangements against overcrowding and the spread of epidemic diseases. Without an accomplished head there is great danger lest inspection should fail to secure for the town a good state of public health.

THE Health Committee of Liverpool have resolved to consider and frame amendments in the Public Health Bill. There is a considerable decrease in the average death-rate. The committee have at length taken eleven acres of land at Bromborough, on which to deposit the town refuse, hitherto used for making the foundations of dwelling-houses. The borough engineer has received orders to execute the works necessary for preparing the land for the use to which it is to be applied.

MR. WALTER THOMSON, of Shahadab, has forwarded to the "Committee for securing a complete medical education to women" the sum of £100 in aid of the funds of the Committee, and in protest against the conduct of "some of the professors and students of the Edinburgh University." From another Indian source the cause of female medical education has just been subsidised, the Mahometan Nawab of Rampoor having presented to the Bareilly mission a large building for the female students.

CAPTAIN BURTON, passing through Edinburgh *en route* to Iceland, presented to the Museum of Science a lock of hair from the Palmyran "tomb-towers." It shows that the Palmyrans, like the Romans, lixiviated the hair and produced the colour of our modern auricome. Captain Burton will explore Iceland not only for prehistoric and naturalist purposes, but for its capabilities as a health resort.

THE forthcoming meeting of the Poor-law Medical Officers' Association, Ireland, will be held at the College of Physicians, Dublin, on June 3rd, Sir Dominic Corrigan, Bart., M.P., in the chair. The English association will be represented by Dr. Joseph Rogers.

WE understand that Mr. R. Sleman, Tavistock, Devon, has announced himself as candidate for the vacant appointment of Coroner of his district.

A WINGFIELD Convalescent Home, in connexion with the Radcliffe Infirmary, is to be built near Oxford.

Cipriani, whose unintentional swallowing of a fork while showing some friends how the Japanese juggler performs the sword-trick is known to our readers, has suffered great agony within the last few days. The Florentine surgeons fear that, from the ascertained position of the fork, an operation is impossible, and that the unfortunate man must soon die.

We are asked to state that J. Robt. Walker, M.R.C.S.E., has been presented by the French International Society for the Succour of the Sick and Wounded with the diploma and bronze cross of the Society for his services during the late war, and especially at Beaumont, Saarbrück, and Metz.

Physical science continues to be encouraged at Oxford. The curators of the University have paid to the credit of the Museum delegates the sum of £1000, to be employed for the maintenance and improvement of the collections in the museum.

A dinner in aid of the funds of the Metropolitan Free Hospital was given last week at the London Tavern, the Lord Mayor presiding. During the evening, subscriptions amounting to nearly £5000 were announced.

Lord Northbrook is reported to have been quite prostrated by the heat on the railway journey up to Jubbulpore. The *Bombay Gazette* blames him for not going round by sea.

Dr. Bence Jones, in consequence of ill-health, has resigned his seat in the Council of the Royal College of Physicians.

Dr. Sutherland will commence a course of lectures on Mental Disease at Westminster Hospital on the 4th of June.

The Baroness Bainy has bequeathed the whole of her fortune to the hospitals of Paris.

The College of Physicians has decided to hold a *soirée* shortly.

Foreign Gleanings.

FOREIGN BODIES IN THE EAR.

Dr. Löwenberg has published, in the *Berl. Woch.* (No. 9, 1872) three very instructive cases, accompanied by judicious remarks, illustrating the proper modes of removing foreign bodies from the external ear. The important fact made evident by the cases is the prejudicial nature of the rough or ill-directed attempts at removal which are generally instantly made when the foreign body is complained of. In fact, such attempts may give rise to inflammatory effusion, which forms a bulging ring around the foreign substance. Dr. Löwenberg also shows that the latter may remain in the outer ear for several weeks without occasioning great discomfort. Also that the foreign body, or the instruments used to remove it, sometimes perforate the membrana tympani; but that this membrane may eventually recover its integrity. We also notice that such perforation may be proved by the reappearance of water injected into the ear at the mouth and nose, or by forcible expiration when both the latter are closed. In the latter instance bubbles of air will be noticed in the water left in the meatus.

The author relies chiefly on injections of water, and, these failing, on the *agglutinating* method. To carry out the latter he uses a stem delicately surrounded with lint, the end of which, a little unravelled, is dipped in carpenter's glue. None of the glue should touch the sides of the stem. The latter is left from fifteen minutes to an hour, and the fastening becomes so firm that the foreign body can be extracted by careful management. A bead thus removed has remained attached to the stem for three years. Two cases, after all other means had failed, proved successful with the glue; and a third at once yielded to injections.

A strange circumstance was noticed in a boy of five years. A shirt button had been introduced into the left ear, and was eventually found there; but when the child came under Dr. Löwenberg's notice, the *right* ear was complained of. He saw nothing in it, and when, according to his custom, he explored the supposed sound ear, the button was seen lying against the membrane. The explanation was that, after the first attempts, the boy became so alarmed and confused that he presented to the first surgeon called the right ear, which, in consequence of manipulations, became inflamed, and was looked upon as containing the foreign body.

From the details of the cases it would appear that Dr. Löwenberg is in Paris quite a specialist as regards these extractions. He seems, however, to undervalue the delicate instruments which have been devised for the purpose. No doubt roughness or blind explorations are mischievous, but proper instruments, used with gentleness and with due regard to the anatomy of the part, should not be despised. The gluing method is very attractive through its simplicity and proved efficacy. The author especially directs attention to the position of the head when injections are used. It should be such as to favour the *vis a tergo* of the stream of water.

ABORTIVE TREATMENT OF GONORRHŒA.

M. Ledeganck maintains, in a pamphlet lately published at Brussels, that by cauterising the fossa navicularis on the third day the disease can be arrested, as the inflammation has not as yet extended further. Those who have much experience in the treatment of this complaint know that such a measure does not arrest the discharge, and that, by the application of nitrate of silver, abscesses on either side of the frenum are likely to appear.

CAUSES OF THE VARIATION IN THE AMOUNT OF OXYGEN AND CARBONIC ACID IN THE BLOOD.

Drs. Mathieu and Urbain give the results of their researches on the gases of the blood in the last part (May) of M. Brown-Séquard's *Archives de Physiologie*. They have ascertained the accuracy of the following law:—"That in warm-blooded animals the volume of oxygen absorbed by the blood varies inversely with the temperature of the air that they respire." In other words, with a warm external temperature the amount of oxygen circulating with the blood is diminished, with a cold external temperature it is augmented. Hence under the former condition all the processes of organic combustion are rendered more active, whilst they are retarded under the latter condition. Further, these experiments show that with diminished pressure there is diminished absorption both of oxygen and carbonic acid by the blood, and *vice versâ*.

HOUSTON'S OPERATION.

Hæmorrhoids, connected with prolapsus, were successfully operated upon by the application of nitric acid some thirty years ago by Dr. Houston, of Dublin. The method found great favour at the time, but has been somewhat displaced by the ligature, and the section followed by the actual cautery. Billroth, of Vienna, has of late revived Houston's operation, and reports excellent results, especially in those cases where frequent and dangerous hæmorrhage had occurred.

THE COLLEGE OF PHYSICIANS.

The College at its meeting on Friday, the 24th ult., had under consideration several important matters. A report of the Council was read in the first place, in which it was recommended that authorised reports of the College proceedings should be suspended in the College-hall, with the view of affording greater publicity to the proceedings of the College. The Council, it appears, does not see its way clear to furnish authorised reports to the medical press, and deemed the step which they recommended the College to to adopt to be the most unobjectionable mode of giving the profession at large a knowledge of College matters. It was

proposed by one of the Fellows that, in place of the recommendation of the Council submitted, the proceedings of the College and special reports dealing with matters of importance should be printed and circulated among the Fellows; but this was not carried, the Treasurer pleading extreme poverty, and urging the difficulty of meeting the expense which would be incurred by printing and postage. The Fellows adopted the proposal of the Council, and the first step has, therefore, been taken to break through the hitherto prevailing system of enshrouding in as much mystery as possible the doings within the walls of the College. It was referred to the Council finally to find the best mode of giving effect to the wishes of the College in regard to its proceedings.

The next business was the enactment, for the second time, of the following bye-laws:—1. "That the office of representative of the College on the Committee of Reference for the Examining Board for England shall be an annual one." 2. "That the Council shall nominate four Fellows of the College whom they would recommend for election by the Fellows as representatives on the Committee of Reference for the Examining Board for England." It is understood that the members of the committee will be eligible for re-election, and, in accordance with the original conjoint scheme, will be able to hold office for four years.

A report from the Leprosy Committee on certain alleged instances of the contagiousness of leprosy submitted to the College for its opinion by Lord Kimberley was presented and accepted, and ordered to be sent as the reply of the College to Lord Kimberley's communication. The report stated that two instances were referred to, the one in which a leprous woman in the asylum in the Island of Curieuse was supposed to have been attacked by leprosy from cohabiting with male lepers, the other in which the medical attendant of the asylum also was supposed to have contracted leprosy "in the exercise of his professional duties" from cohabitation with leprous women in the same asylum. The Leprosy Committee expressed their opinion that as the sister of the woman was a leper at the time the woman left Africa, the disease in the latter might very likely have been engendered in Africa in her also, and that there was some doubt whether the medical attendant referred to was really a leper, the testimony on this point being altogether unsatisfactory. They, therefore, found no reason for recommending, in consequence of the facts before them, the College to alter its views already expressed in the Leprosy Report as to the non-contagiousness of the disease. The College was, lastly, asked to receive a series of recommendations of the Conjoint Committee relative to the mode of carrying into effect the scheme for an Examining Board for England; and a request was made that this document should be regarded as strictly confidential. The proceedings in regard to this matter are of such importance that we have noticed the subject specially and prominently in another part of our present number.

THE SANITARY CONDITION OF THE CITY OF LONDON.

THE twenty-third annual report of the Medical Officer of Health for the City of London has just been published, and is, in many respects, exceptionally interesting. The population of the City (as taken at midnight on a Sunday last year) amounted to 75,842 persons. Its area comprises 723 statute acres, and there are 9435 inhabited houses, 8 persons to a house, and 105 to an acre. The day population of the City is estimated at more than a quarter of a million, so that the density of the population, both by day and night, is still excessive, although the number of residents has decreased since 1841 about 80 per cent. The death-rate is at the rate of 23, and the birth-rate 24·2 per 1000, so that, comparatively speaking, the former is not excessive, and the latter is evidently low. Small-pox killed 88 persons in the City last year, as compared with 8 in 1865, 29 in 1866, 31 in 1867, 18 in 1868, 2 in 1869, and 6 in 1870; and, in discussing the prophylactic advantages of vaccination, it is remarked, that in Christ's Hospital, which has an average of 800 boys, and where it is the practice to vaccinate all on entry, one death only has occurred from small-pox during the last fifty years. Dr. Letheby discusses the quality of the water-supply very energetically, and characterises the terms used in the Registrar-General's Reports on this subject as "at first sight undoubtedly alarming, yet when closely examined found to be but mere figures of speech, with perhaps a rather bold touch of exaggeration."

During the year, 20,380 houses and 303 bakehouses have been inspected, and orders for improvement issued in 2188 cases. A total of 1796 vessels were inspected in the city district (which district, however, extends only from the Temple to the Tower), and Dr. Letheby, referring to the fact that this is the only part of the port systematically supervised, and to statistics furnished by Mr. Harry Leach, again emphasises the importance of instituting a regular sanitary authority for the shipping in the river and the docks, and subscribes to the opinion enunciated in THE LANCET, that the Thames Conservators are the most fit and proper persons to conduct the work, and should fill the blank at present existing in the 19th Clause of Mr. Stansfeld's Public Health Bill.

One of the most important improvements recorded in the report is the erection of a public mortuary and disinfecting apparatus in Golden-lane, both of which are now open and have been extensively utilised. It appears that during the year no less than 132,388 lb. (nearly 60 tons) of meat have been condemned in the City as unfit for human food, and there have been 9 prosecutions and 7 convictions for sending diseased and unsound meat to the markets.

We are glad to congratulate Dr. Letheby on the practical character of his report. The City has always been favourably distinguished among the other metropolitan health districts for the liberality with which its sanitary system of supervision is carried out. This report, which we have endeavoured to condense, is in itself the condensed result of much hard and successful work—successful chiefly because the Commissioners of Sewers respond quickly and willingly to the calls of their health officer.

THE STOCKWELL FEVER AND SMALL-POX HOSPITALS.

THE committee of the above hospitals have published a valuable report of one year's work, drawn up by Dr. McCann, the medical superintendent of the Small-pox Hospital.

"On the 31st January, 1871, the Small-pox Hospital was opened with its original number of 102 beds; but so rapidly were patients sent in that on the 3rd February it was found necessary to raise the accommodation to 130 by placing beds in the day rooms; and, having regard to the pressure for space, the committee increased the number of beds in the Fever Hospital from 176 to 224, and, at the request of the managers, opened that hospital on the 6th March for the reception of small-pox cases. In a few days the latter hospital rapidly filled, and on the 24th of March it was found necessary to further increase the accommodation by placing 30 additional beds in the day rooms.

"Although during the month of April some relief was afforded by the transmission of convalescent patients to the Islington Convalescent Hospital of the managers, and to a Convalescent Home at Clapton, the rapidity with which the disease spread during this month in the southern district created such a demand upon the hospitals that the committee determined, with the approval of the managers, not only to raise the number of beds within the two hospitals from 384 to 500, by placing beds for convalescents in the corridors and landings, but also to pitch an encampment for 120 convalescent patients on the vacant plots of ground in front of the Fever Hospital.

"With the valuable co-operation of General Sir Henry Storks, M.P., G.C.B., and Colonel Stephenson, C.B., commanding the Scots Fusilier Guards, the committee were enabled within three days to obtain and get ready for occupation ten hospital marquees, capable of accommodating 120 patients. The total cost of these tents, including flooring, passages, &c., was about £400, or less than £3 10s. a bed.

"The wisdom of the steps taken by the committee was fully verified in the ensuing month of May, when the dis-

case appeared to attain its maximum, upwards of 600 patients being under treatment at one time in the hospitals, with a weekly admission of nearly 150 fresh cases, and a total of nearly 2000 patients having passed through the hospitals up to the end of May.

"From this date the disease began to abate, and with the additional relief afforded after the second week in May by the use of the hospital ship *Dreadnought*, the number of patients was so far lessened as to enable the committee, towards the end of July, to reduce the beds from 620 to 450, with a corresponding reduction in the staff; and by the end of September the Fever Hospital was emptied of patients, and its cleansing and disinfection for the reception of fever patients proceeded with.

Scarcely, however, had this been completed, and the hospital prepared for its original purpose, than a fresh outbreak of small-pox towards the end of December, in the southern district, rendered it necessary again to have recourse to the employment of a portion of the hospital for the treatment of small-pox cases, in order to avoid the necessity of sending acute cases on so long a journey as to Hampstead Hospital.

"From 31st January, 1871, to the 1st February, 1872, a total of 3976 patients passed through the hospitals, of whom 700 or 17·6 per cent. have died; and, as showing the extent to which the convalescent accommodation provided by the managers was turned to account from the Stockwell Hospitals, it may be mentioned that upwards of 900 convalescents were transferred therefrom.

"The daily cost per head for the maintenance and clothing of patients during the half-year ending Lady-day, 1871, was 2*s.* 2¼*d.*, and for the maintenance and salaries of officers, &c., during the same period, 2*s.* 1*d.*, but for the half-year ending Michaelmas these charges had been reduced respectively to 1*s.* 2¼*d.* and 10*d.* per head.

"The first, and perhaps most serious, trouble with which the committee have had to contend was the difficulty experienced at the outset in getting suitable nurses. Doubtless the loathsome nature of the disease, as well as its contagious character, had the effect of deterring the better class of nurses from entering on the work, but as it became known that, owing to the protection afforded by carrying out a careful system of revaccination, the staff of the hospitals enjoyed almost a complete immunity from the disease, very suitable women presented themselves, and the committee have been enabled from time to time so to weed out the indifferent nurses with whom they at first had to be contented, that they at present possess a staff which will favourably bear comparison with that of any hospital in the country."

The committee appear to have had some trouble in officering the Fever Hospital, but it is gratifying to find that they record their entire satisfaction with the way in which the officers of the Small-pox Hospital, Drs. McCann, White, and McKellar, discharged their onerous duties.

SOCIAL SCIENCE ASSOCIATION.

ON Monday evening a paper was read by Edwin Chadwick, Esq., C.B., "On the Duties of Medical Officers of Health, and the separation of Private Practice from Public Medical Service." Mr. Chadwick referred all the defects of the Poor-law medical arrangements to the union of public and private practice, and he advocated the employment of a special class of civil medical officers devoting the whole of their time to attendance upon the poor, the prevention of disease, the registration of disease and the causes of death, attendance on prisoners, supervision of factories, schools, workshops, &c. He proposed that this class of civil servants should be appointed by the central government by competitive examination, and that their rate of pay should be fixed on the scale now given to the army surgeons. He strongly denounced the payment of extra fees for midwifery, and said that difficult cases were sure to be more numerous amongst paupers whilst there was attached to them a fee which was of importance to the ill-paid officers. The present system led to actual neglect of the poor which had been concealed from official inspection, and there could be no hope of the private practitioner doing good sanitary work until he was made thoroughly independent of those against whose interests it would be his duty to take action.

Dr. Stallard bore testimony to Mr. Chadwick's invaluable sanitary labours, but felt bound to differ from him on nearly every point. If the Government undertook the appointment of local officers they would diminish the responsibility of the local authorities, and assume that which they could by no possibility fulfil. The effect of electing men exclusively to public civil service would be to provide either an introduction for young and inexperienced members of the profession or a refuge for those who had failed in practice. Such men would be more completely the tools of the local authority than those who had a private practice to fall back upon, and who had a moral weight in the community—in fact, a character to lose. He denied entirely that the poor were sacrificed. Medical officers with any regard to their reputation and interests were compelled to attend to the pauper before the private patient. The former has no one but the Poor-law medical officer to go to. He is the *protégé* of the whole community. But the private patient can pay for another attendant, and no one would sympathise with him if he neglected to procure advice from some one else. The costliness of a civil medical service would be a main objection to its adoption, for it is obvious that in many districts it would be a waste of power to have one attendant for the poor and another for the public at large. With regard to the general imperfection of the Poor-law service, he would remind the lecturer that no attempt had been made to inspect or improve it. The whole medical administration had been left to the ignorance and cupidity of boards of guardians, and he would point out that the effect of establishing dispensaries in the metropolis had been to diminish greatly nearly all the evils of which the lecturer complained. With regard to the competence and independence of the medical officer, we must rely upon the general improvement of medical education and the advance of public opinion with regard to sanitary reform. No compulsory system would make things perfect all at once, and the officer who tried to maintain his independence at the cost of cordiality with those with whom he is compelled to act, would find that he was obstructing instead of advancing the progress of sanitary improvement.

Mr. Holland, Mr. Fred. Hill, and Mr. Michael, Q.C., all spoke against Mr. Chadwick's proposals, and letters to the same effect were read from Dr. Druitt and Professor Gairdner of Glasgow, the latter saying that he owed a great part of his sanitary power to the fact that he was able to utilise the experience and influence acquired in the general practice of his profession.

ST. THOMAS'S HOSPITAL OLD STUDENTS' BIENNIAL FESTIVAL.

ON Tuesday evening, May 28th, a large number of old and present students dined together at the Cannon-street Hotel, the chair being taken by Dr. Risdon Bennett. After the conclusion of the dinner, which was admirably served, and which was enlivened by the band of the Coldstream Guards, the Chairman proposed "The Queen and the Royal Family."

To the toast of "The Hospital of St. Thomas" Sir Francis Hicks responded, and expressed his anxiety to promote the welfare of the school as well as the hospital.

The Chairman next proposed "The School of St. Thomas's Hospital, past, present, and future." He was listened to with marked attention, and his speech was frequently interrupted with applause. He was particularly well received when he dwelt upon the importance of clinical instruction, and the advisability of students becoming acquainted with the minor subjects of professional studies before coming to the hospital.

Mr. Gibson responded "for the Past" in a speech which created considerable amusement. "For the Present," the Dean, Dr. Peacock, replied; and "for the Future," Mr. Mac Cormac made an excellent and most humorous speech.

Mr. Le Gros Clark received a complete ovation when he rose to propose the health of the chairman. He referred in feeling terms to the friendship which had existed for so many years between himself and the chairman, and urged

his younger friends present to strive to tread in the same steps of uprightness and honesty, even if they could not reach the same intellectual excellence or professional position as the chairman.

This was suitably responded to by the Chairman, who next proposed the health of the visitors, which was answered by Professor Stromeyer, who, while acknowledging the compliment made him by making him a guest, claimed the privilege of being an old student of St. Thomas's. The professor made an excellent speech in extremely good English.

Mr. Heckstall Smith next gave the toast of "Success to the Biennial Festival," and spoke in warm terms of the pleasure which these biennial meetings afforded to men of his time, as well as to the younger of the old students.

The Chairman next proposed the honorary secretaries, Dr. Rayner and Mr. Wagstaffe, who were called upon to respond.

The dinner terminated about ten o'clock, after a most successful meeting, rendered no less pleasant by the small number of toasts, and the reasonable length of the speeches.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

AT a meeting of this Association held at the Medical Club on Tuesday, May 28th, certain amendments to the Public Health Bill were read and discussed. A resolution was then proposed by Mr. Wickham Barnes, and seconded by Dr. Montague Thomas, honorary secretaries to the Association—"That this meeting thoroughly approves of, and will endeavour to support, the 13th Clause of the Public Health Bill appointing Poor-law medical officers health officers, seeing in that clause an earnest endeavour on the part of the President of the Local Government Board to improve the status as well as the remuneration of the Poor-law medical officers." Considerable discussion followed, the opinion of the meeting being that the clause had not been properly understood by its opponents, it having been viewed by them in too narrow and suspicious a light. On the resolution being put to the meeting it was carried. Mr. Barnes then proposed that a memorial be addressed to Mr. Stansfeld, praying that a Superannuation Clause be added to the Bill; but, though the meeting was unanimous in the object of the resolution, it was considered advisable to wait for another opportunity. A communication having been read by the President from Dr. Maunsell, of Dublin, relative to a Bill to amend the Act providing for superannuation allowances to officers, it was proposed by Mr. Barnes, seconded by Dr. Vance, and carried,—"That it is desirable, in the opinion of this Association, that a clause should be introduced into the Bill so that union officers shall include medical officers of the dispensaries of such unions, and that the words 'superintendent registrars' shall be followed by the words 'and registrars,' so that the dispensary physicians of Ireland may be able to compute the fees from registration in estimating their salary for the purpose of superannuation; and this Association pledges itself to exert its parliamentary influence in aid of the above amendment."

THE MEDICAL CLUB.

THE opening house dinner of the season was held at the Club on Tuesday, May 28th, on which occasion the chair was occupied by J. Brady, Esq., M.P., and a very agreeable evening was the result. Amongst the company present were the Right Hon. the Lord Chief Baron, the Hon. Smee Ayrton, M.P., Mr. Roger Eykyn, M.P., Mr. Maguire, M.P., Mr. Mitchell Henry, M.P., Sir Charles Locock, Sir William Fergusson, Mr. Edward Cock, Mr. Erasmus Wilson, Mr. Teevan, &c. &c. On Thursday, the 3rd instant, an extraordinary general meeting was held at the Club, to take into consideration and decide upon the course to be adopted in consequence of the retirement of the present hon. secretary, Dr. Lory Marsh. There was a large attendance of members. A letter was read to the meeting from Captain Valpy, a member, offering to "purchase the Club," and requesting to be proposed as the future proprietor. It was ultimately unanimously resolved that the Club should be continued on the proprietary principle.

SUPERANNUATION (POOR-LAW MEDICAL OFFICERS IRELAND) BILL.

WE beg to call the particular attention of the profession to the following Bill, which has been brought in by Lord Hartington and the Irish Attorney-General. As it stands, this measure will exclude dispensary medical officers, &c., from its benefits.

Dr. Maunsell proposes, as amendments, the passages which we have printed in italics, and we trust that the profession will insist on their adoption.

UNION [*and Dispensary*] OFFICERS (IRELAND) SUPERANNUATION.

A BILL to amend the Act[*s*] providing Superannuation allowances to officers of unions [*and of dispensary districts of such unions*] in Ireland.

Whereas it is expedient that the Act[*s*] of the twenty-eighth year of the reign of Her present Majesty, chapter twenty-six, [*and of the thirty-second and thirty-third years of the reign of Her present Majesty, chapter fifty*] providing superannuation for officers of unions in Ireland, [*and for medical officers of Poor-law unions, and of dispensary districts of such unions in Ireland*] should be amended,

Be it therefore enacted by the Queen's most excellent Majesty by and with the advice and consent of the Lords spiritual and temporal and Commons in this present Parliament assembled, and by the authority of the same, as follows:—

1. *Short title.*—This Act and the recited Act[*s*] may be cited together for all purposes as "the Union [*and Dispensary*] Officers (Ireland) Superannuation Acts 1866, [1869], and 1872.

2. *Superintendent registrars to be deemed union officers.*—The superintendent registrar [*and the registrars*] of births, deaths, and marriages appointed in any union in Ireland shall be deemed officer[*s*] within the operation of the recited Act[*s*] and in computing the salary of any officer of a union [*or dispensary district of such union*] under the recited Act[*s*] and this Act the amount of the emoluments of his office on the average of the three years concluded in the last preceding quarter may be taken into calculation by the guardians, and charged upon the rates of the union at large.

THE TATTOOED MAN.

To the Editor of THE LANCET.

SIR,—I was present at the Vienna Medical Society when the famous tattooed man was displayed to the members. Many of them were by this time tolerably familiar with his appearance, and the real interest of the evening centered in a learned professor who had undertaken to decipher the red dots freely scattered among the many elaborate and beautiful figures on the skin. After some difficulty, arising from the very formless character of the inscriptions, they were at last pronounced to be written in the Birmhese language, and much confirmation is thus given to the striking theory of Dr. Gascoigne. It was felt at the time that the man's statement of his own case savoured strongly of romance, and that the punishment of a pirate by a semi-barbarous tribe like the Tartans would probably have assumed a more summary form than ornamenting his body with the most exquisitely graven designs. It now seems much more probable, as suggested by the local papers at the time, that he had voluntarily submitted to a painful operation in hopes of reaping his reward from the curiosity of the public. It would be interesting to know whether in Chalmers' case any glandular enlargement was observed. Virchow (Cellular Pathology) has described and figured the deposit of pigment which invariably occurs in the first group of lymphatic glands adjoining tattooed skin, and it was considered somewhat remarkable that careful search could detect none of that engorgement which so extensive a surface irritation might have been expected to produce on the Viennese specimen. Possibly, however, the absorption of a certain amount of colouring matter is not necessarily attended by enlargement of the gland sufficient to be felt by the finger.—I am, Sir, your obedient servant,

May, 1872. ROBERT FARQUHARSON.

BIRMINGHAM.

(FROM OUR OWN CORRESPONDENT.)

A CONFERENCE of Poor-Law Guardians, Town Councillors, and members of Local Boards of Health, was lately held at Worcester, to consider Mr. Stansfeld's Public Health Bill. After Mr. Hastings, the prime mover of the conference, had condemned the various provisions of the Bill as menacing the independence of the local governing bodies, he went on to complain of the "wasteful expenditure" involved in the appointment of a paid medical officer of health at a salary of not less than £50 per annum, by every sanitary authority. As the Legislature have to rely on the medical officer for the local carrying out of the provisions of the Bill, the office is not likely to be dispensed with in deference to any arguments such as those brought against the Bill by the Worcester conference.

The authorities of Walsall are taking energetic measures against the epidemic of small-pox. Several parents have been fined for neglecting to have their children vaccinated; and notice is given by the police, that any person suffering from small-pox who wilfully exposes himself, or who exposes linen or clothing that has been used for small-pox patients until it has been properly disinfected, will be fined £5.

Another death from hydrophobia is recorded at Tamworth, making in all six cases of death from that disease in six months.

At the last meeting of the Midland Medical Society, Dr. Warden brought forward a case of Spina Bifida associated with double talipes equino-varus in a female child who lived but a few days, and who just before death had an attack of convulsions, during which the uterus was prolapsed externally. Mr. Lawson Tait presented a female, aged twenty-five, the mother of five children, who, since her last confinement, nine weeks ago, has had a fistula in the fundus uteri leading into the peritoneal cavity. Mr. West, the president, examined the patient and confirmed Mr. Tait's opinion as to the nature of the case. Mr. Bennett May exhibited specimens of intra-capsular fracture of the neck of the femur, and of dislocation of the fifth cervical vertebra producing disorganisation of the cervical portion of the spinal cord. Mr. Gilbert Smith presented a case of aneurism of the circle of Willis in a man aged fifty, who died from rupture of the left middle cerebral artery. Mr. Mann brought forward a case of obstruction of the bowels, due in the first instance to retroflexion of the uterus, and which subsequently proved fatal in consequence of intussusception of the colon. Dr. Fowler Boddington then opened a discussion on the question "Is it desirable that women should be admitted into the medical profession?" and sustained his opinion that it was desirable by many cogent arguments. Dr. Keyworth proposed as an amendment that "it is not expedient that women should be admitted to the medical profession," and, after a sharp debate, in which Dr. Wade, Mr. Furneaux Jordan, Mr. Tait, Mr. Bassett, Mr. Thomas, and others took part, the amendment was carried by 13 to 12.

Birmingham, May 27th, 1872.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

THE opening by Prince Arthur of the Southern Hospital, and of the Fancy Fair and Bazaar in Sefton-park, in aid of the funds of the hospital, have been the great events in Liverpool during the past week; and so much did they engross the minds of the people that business was almost at a standstill; whilst continued fine weather added to the success of the whole.

The new Southern Hospital, or, as it is to be hereafter called, the Royal Southern Hospital (special permission having been obtained from Her Majesty to do so), is situated at the south end of the town, near the Docks, about 300 yards from where the old hospital stands. It is surrounded on all four sides by streets, and is built in the form of a parallelogram, 300 ft. long by 180 ft. wide. It is arranged on the pavilion system. The administrative department occupies the front in Caryl-street, with the principal entrance in the centre. Two pavilions running from west to east form the two sides of the parallelogram, and in these all the wards are contained. Four contain 26 beds in each, and seven contain 12 beds each; a total, with private and special wards, of 210 beds. The airing-ground occupies the space between the two pavilions. This space is intersected by a transverse corridor which connects the pavilions. The cubic space allowed to each bed is 1850 ft. The lavatories and waterclosets for each ward are situated in the towers, which are attached to the ends of the pavilions. There is not much architectural display. The hospital is built of brick with stone facings. Its cost will be about £40,000. The greatest attention has been paid throughout by the building committee to attain as nearly as possible to sanitary perfection in the carrying out of details, and no modern improvement in hospital construction has been omitted. The hospital is intended not only for accidents and general surgical and medical cases, but has special departments for three of the great subdivisions—the ophthalmic, skin diseases, and children's wards being fitted up with every suitable appliance.

The opening ceremony on Tuesday, the 21st, by Prince Arthur, was a very imposing affair. The committee followed in the arrangements the precedent of the opening of St. Thomas's Hospital by the Queen. Twelve hundred visitors were invited, and were arranged in different parts of the building. The Prince, accompanied by the mayor and his suite, arrived at the hospital at twelve o'clock, and was received by the bishop of the diocese, the president of the committee, and medical staff, and conducted to a dais at the end of the hall, where an address was presented to him, to which he read a suitable reply. The National Anthem was then sung, after which the procession, having re-formed, conducted his Royal Highness through four of the principal wards, which were completely furnished. As the Prince left each ward he named them respectively the Victoria, Albert, Alexandra, and Arthur Wards. After inspecting the chapel and operating theatre, he was led into another large ward, and having ascended the dais in the centre, he declared the Royal Southern Hospital open. An anthem and hymn were sung by the choir of the Philharmonic Society. The Bishop of Chester then offered up a prayer, and pronounced the benediction; and the proceedings terminated.

The Fancy Fair and Bazaar in Sefton-park were open during the whole week, and were visited twice by the Prince. He was everywhere enthusiastically received. Upwards of 120,000 people visited the fair. The bazaar alone is said to have realised £10,000; and it is expected the gross receipts will not be less than £22,000. Of course there has been a considerable expenditure, but still a handsome sum will be left to start the hospital free of debt.

May 28th, 1872.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 23rd ult.:—

Bennett, William Edward, Stoke Devonport.
Lyell, Robert Wishart, Upper Norwood.
O'Connor, Watkin Roberts, Berners-street.

As Assistant in Compounding and Dispensing Medicines:—

Poyser, Robert, Wirksworth, Derbyshire.

On the same day the following gentleman passed his First Professional Examination:—

Dobson, Joseph, Leeds Hospital.

COLLEGE OF PHYSICIANS, IRELAND. — At examinations held on May 13th, 15th, and 16th, the following gentlemen obtained the licences in Medicine and Midwifery:—

MEDICINE. — Leslie Crosbie, Michael Fitzgerald, Myles O'Connell M'Swiney, William Henry Middleton, Edward Joseph Nugent, Charles Palmerston Turner, William Woods.

MIDWIFERY. — Michael Fitzgerald, William Henry Middleton, Myles O'Connell M'Swiney, Charles Palmerston Turner.

UNIVERSITY OF GLASGOW. — The following gentlemen have had degrees in Medicine and Surgery conferred upon them during the session 1871-1872:—

DOCTORS OF MEDICINE AND MASTERS IN SURGERY.

James Caithness, Scotland. | John P. Macintyre, West Indies.

DOCTORS OF MEDICINE.

John H. Arbuckle, Scotland.
Hugh Arthur, Scotland.
Samuel Biggart, Ireland.
John Booth, England.
John E. Brodie, Scotland.
Murdoch Cameron, Scotland.
Neil Carmichael, Scotland.
William Crawford, Scotland.
Girdhariial Ratanlal Daphtary, Ind.
William Dougan, Scotland.
Frederick B. Fisher, England.
Robert Forsyth, Scotland.
William W. Fulton, Ireland.
James Galloway, Scotland.
John Gardner, Scotland.
James St. Clair Gray, Scotland.
Robert Hamilton, Scotland.
James P. Heeney, Ireland.
John Percival Hirst, England.
W. Goodfellow Laidlaw, Scotland.
John Louie, Scotland.
Thomas Lyle, Ireland.
James M'Connochie, Ireland.
Alex. Wm. M'Farlane, England.
William M'Lachlan, Scotland.
Robert Ayre Smith, England.
Peter Stewart, Scotland.
Robert D. Taylor, Scotland.
Archibald Templeton, Scotland.
William Wyllie, Scotland.

BACHELORS OF MEDICINE AND MASTERS IN SURGERY.

John Adams, Scotland.
William S. Anderson, Scotland.
Thomas Arthur, Scotland.
John Banks, Scotland.
George Calderwood, Scotland.
Edward E. Campbell, Scotland.
John Caskie, Scotland.
James Cathcart, Ireland.
William Clark, Scotland.
William Clements, Ireland.
John Craig, Scotland.
James Diamond, Scotland.
Henry H. Dunbar, Scotland.
Samson Gemmell, Scotland.
William Haldane, Scotland.
John W. Herd, Scotland.
John Josiah Jones, Wales.
James Kennedy, Ireland.
David N. Knox, Scotland.
Thomas M'C. Lees, Scotland.
William Leith, Scotland.
John C. Maddever, Scotland.
John Miller, Scotland.
Andrew Black Morrison, Scotland.
Robert Murdoch, Scotland.
Charles MacBride, Scotland.
John D. Macdonald, Scotland.
Thomas Scotland, Scotland.
Peter Stewart, Scotland.
John Strang, Scotland.
Robert Turner, Scotland.
David Young, Scotland.

BACHELORS OF MEDICINE.

Zalnoor Allee Ahmed, Assam.
William B. Allin, England.
James C. Burnett, England.
William L. Cunningham, England.
William J. Fleming, Scotland.
David G. Kennedy, Ireland.
George Ronald, Scotland.
Christopher Strang, Scotland.

MASTERS IN SURGERY.

William Gardiner, England.
William Marshall, Scotland.
Peter H. M'Kellar, Scotland.
John Harris Ross, England.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Professor Holmes, F.R.C.S., will commence his course of six lectures "On the Surgical Treatment of Aneurism in its various forms" on Monday next, at four o'clock P.M. The usual notices for the election of Members of the Council of the Royal College of Surgeons of England are now in course of delivery to the Fellows of the College. The election will take place on Thursday, the 4th July next, at two o'clock P.M.

THE Mines Regulation Bill has just been issued as amended in committee.

THE grouse on the Scotch moors are said to be suffering from croup.

DR. DARLEY, medical officer to the Coolock Dispensary for the past thirty-five years, has been granted the maximum superannuation allowance permitted by the Act.

BY the great fire in Japan two square miles of a crowded city are laid waste, 30,000 persons are rendered homeless, 10,000 houses have been burnt, and from 250 to 350 persons have been killed.

A COMMUNICATION from the Local Government Board has been received by the Aston (Warwickshire) Board of Guardians, authorising them to borrow £700, in addition to £7500 authorised on January 3rd, for the erection of the new infirmary and detached wards for infectious cases. The borrowing of the £700 was agreed to by the guardians.

MR. PURSER, a member of the Moravian Church, as a result of the recent examinations for the Fellowship of Trinity College, Dublin, has been declared First Fellow. This is the first Protestant-Dissenter elected to a Fellowship in the University of Dublin, it having been, until very lately, believed that all such persons were ineligible for the honour.

BEQUESTS, &c., TO MEDICAL CHARITIES.—Mr. Robert Blake Byass, of Philpot-lane, bequeathed £1000 to the London Hospital, £500 to the Tunbridge Wells Infirmary, and £200 each to the Royal Free Hospital, the Hospital for the Diseases of the Chest, the Consumption Hospital, Brompton, the Convalescent Hospital, Walton, and the Sussex County Hospital, Brighton. The Worshipful Company of Fishmongers have given 100 guineas to the Royal Free Hospital. The Bishop of Cashel bequeathed £100 to the Adelaide Hospital, Dublin. A performance of the Bolton Dramatic Club has produced the handsome sum of £62 5s. 2d. for the Bolton Infirmary and Dispensary.

Medical Appointments.

BOOTH, J. W., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Workhouse District of the Huddersfield Union, vice J. Clough, L.R.C.P.Ed., resigned.

CARTWRIGHT, S. M., M.R.C.S.E., L.D.S., has been appointed Assistant Dental Surgeon to the Dental Hospital of London, Soho-square, vice J. Scully, M.R.C.S.E., L.D.S., resigned.

COX, E., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Abbotsham District of the Bideford Union, vice R. C. Hoyle, L.R.C.P.Ed., deceased.

DRAKIN, C. W. S., M.R.C.S.E., has been appointed House-Surgeon to the Male Lock Hospital, Dean-street, Soho-square, vice A. Appleby Thomas, M.R.C.S.E., L.R.C.P.L., resigned.

ELLERTON, F. C. G., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Lindley District of the Huddersfield Union, vice John Mackintosh, L.R.C.S.Ed., resigned.

ELLIOTT, T., M.B., has been appointed Resident Medical Officer to the Isle of Man General Hospital and Dispensary, Douglas, vice S. Laird, M.D., M.R.C.P.L., L.R.C.S.Ed., whose appointment will expire in July.

GIBSON, J. B., M.D., has been appointed a Medical Officer to the Bideford Dispensary, vice R. C. Hoyle, L.R.C.P.Ed., deceased.

HILL, J. D., F.R.C.S.E., has been appointed a Surgeon to the Royal Orthopædic Hospital.

HUGHES, H. E. G., L.R.C.P.Ed., L.M., M.R.C.S.E., has been appointed Resident Physician to the Royal Infirmary, Edinburgh, vice W. Livesay, M.B., C.M.

KIDD, G. H., M.D., F.R.C.S.I., has been appointed Medical Officer to the Masonic Female Orphan School, Dublin, vice T. E. Beatty, M.D., deceased.

LEACH, MATTHEW, M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the South District of the Sheffield Union, vice John S. Pratt, L.R.C.S.Ed., L.S.A.L., resigned on account of continued indisposition.

PENRUDDOCKE, G., M.R.C.S.E., has been appointed Medical Officer for the Forthampton District of the Tewkesbury Union.

PHILBRICK, T., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer to the Arundel Medical Society, vice C. L. Eversfield, M.R.C.S.E., resigned.

PURCELL, J. G., L.R.C.P.Ed., L.M., M.R.C.S.E., has been appointed Medical Officer to the Knutsford Workhouse, Altrincham Union, Cheshire, vice T. F. Nicholls, L.R.C.P.Ed., L.M., L.F.P. & S.Glas., deceased.

PUZEY, C., L.R.C.P.L., M.R.C.S.E., has been appointed Consulting Surgeon for the Liverpool District of the London and North-Western Railway Company, vice T. Bickerton, F.R.C.S.Ed., deceased.

RAYNER, H., M.D., M.R.C.S.E., has been appointed Medical Superintendent of the Male Department of the Middlesex Lunatic Asylum, Hanwell, vice W. C. Begley, M.D., M.R.C.P.L., resigned.

REID, J., L.R.C.P.Ed., L.F.P. & S.Glas., has been appointed Medical Officer to the Odd Fellows Lodge, Troon, Ayrshire, vice W. Douglas, L.F.P. & S.Glas., deceased.

RITCHIE, A. E., M.D., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Parochial Medical Officer for Monifieth, Forfarshire, and Medical Officer to the Port, Broughty-ferry, Forfarshire, vice J. H. Park, M.D., L.R.C.S.Ed. deceased.

ROBERTSON, Mr. G. J. (of Aberdeen), has been appointed House-Surgeon to the Ashton-under-Lyne District Infirmary, vice J. Duncan, M.B., C.M., resigned.

SHEPPARD, H. H., M.R.C.S.E., has been appointed Medical Officer to the Norwich Friendly Societies' Medical Institute.

THOMPSON, J., M.D., F.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Buckland Brewer District of the Bideford Union, vice R. C. Hoyle, L.R.C.P.Ed., deceased.

Births, Marriages, and Deaths.

BIRTHS.

BOURNE.—On the 20th ult., at Mountfield, Malbury, near Axminster, the wife of Walter Bourne, M.D., of a son.

COOKE.—On the 26th ult., at Rowcroft, Strand, the wife of Alfred S. Cooke, M.R.C.S.E., of a son.

MITCHELL.—On the 26th ult., at Rhynie, Aberdeenshire, the wife of Dr. A. G. Mitchell, of a daughter.

MOORE.—On the 26th ult., at Stourport, Worcestershire, the wife of Walter Moore, M.R.C.S.E., of a daughter.

WARD.—On the 23rd ult., at the Royal Arsenal, Woolwich, the wife of W. P. Ward, M.R.C.S.E., Surgeon-Major Royal Artillery, of a son.

MARRIAGES.

HAYES—WEBB.—On the 7th ult., at St. Michael's, Basingstoke, Hawkesley Roche Hayes, L.R.C.P.L., to Cassandra Charlotte, daughter of Charles Webb, M.R.C.S.E.

HAMILTON—RAYNER.—On the 23rd ult., at the Albion Chapel, Edinburgh, Alexander Hamilton, L.R.C.P.Ed., L.R.C.S.Ed., of Ashton-under-Lyne, eldest son of Dr. Hamilton, of Falkirk, to Helen, third daughter of Frederick Rayner, Esq., of Thornfield Hall, Ashton-under-Lyne.

DEATHS.

BARNETT.—On the 22nd ult., at Clarendon-gardens, Maida-vale, Dr. S. B. Barnett, aged 71.

DOYLE.—On the 8th ult., Edward Doyle, M.D., of Colne, Lancashire, aged 53.

HARRIS.—On the 23rd ult., C. Harris, M.R.C.S.E., of Lansdowne-place, Brighton, aged 81.

PRINGLE.—On the 31st of March, on board the "Parramatta," on his way home from Australia, Dr. Geo. Hogarth Pringle, of Parramatta, Australia, eldest son of James Hall Pringle, Esq., of Clelthongh, Jedburgh, N.B.

WIGHT.—On the 26th ult., at Grazely Lodge, near Reading, Dr. R. Wight, late of the Hon. E.I.Co.'s Service, aged 76.

Notes, Short Comments, and Answers to Correspondents.

STARVED TO DEATH.

FROM a Parliamentary Return just issued we gather that during the year 1871 there were 100 inquests held by the various London coroners in cases of death by starvation (direct or indirect), privation, or exposure within the metropolitan district. Of these inquests, 2 fell within the Western division, both on the bodies of infants who were found to have died, the one from want of food, and the other from improper food. Mr. Humphreys held 25 such inquests in the Eastern division, all but one of which were on the bodies of adults, 22 of whom died from want, and 2 from exposure. From the Central division Dr. Lankester returns 42 inquests on infants and children under ten years of age, and 31 on adults; 54 of these deaths occurred from disease either accelerated or directly caused by want, the remainder being ascribed to the effects of "exposure," "want of proper nursing," "unskilful treatment" for scarlatina, "cold," and "want of fresh air." 12 of Dr. Lankester's inquest cases were inmates of St. Pancras Workhouse at the time of their decease, and the verdicts ascribe 7 of these deaths to atrophy or tuberculous atrophy, 1 to asthma, and 2 to pneumonia—in each case "accelerated by want"; 1 to "congestion of brain and lungs, accelerated by cold"; and 1 to "pneumonia, accelerated by exposure." 3 inmates of the workhouses of St. Giles's, 1 of Islington, and 1 of the City of London, are also included in Dr. Lankester's Return. As this Parliamentary Return appears now to be established as an annual one, we would suggest that a column might be added, giving any particulars of each case which would help to show in what degree the death was attributable to wilfulness on the part of the deceased, or to neglect on the part of others.

Intending Candidate.—It is uncertain at present whether there will be any examination this year for the army medical service.

M.D. (York) should apply to the publishers, Messrs. J. & A. Churchill.

REMARKABLE ESCAPE FROM FRACTURE OF THE SKULL.

To the Editor of THE LANCET.

SIR,—The letter in your impression of May 18th, about a "Remarkable Case of Escape from Fracture by Direct Violence," leads me to send you a note of a case at present under my care.

On the 4th of May I was asked to see a little boy about two and a half years old, who, while playing, was knocked down by a cart laden with 12 cwt. of flour, in all 21 cwt., the wheel passing over his head from behind forwards on the right side. The carter distinctly affirmed that he saw the wheel do so, and, from the injuries received, I do not question the statement. On examination, I found the child suffering from shock, with a scalp wound, extending from behind the right ear upwards and forwards, about five inches in length, exposing, but not injuring, the pericranium; in front of the ear, and extending round below the eye, was a contused wound about an inch in length, while the tissues of the cheek were squeezed almost to a jelly; the left cheek was scraped and bruised, while the lower jaw on the left side was fractured; a little blood came from the left ear. The wound was sewed and treated antiseptically, while the fracture was treated in the ordinary way. Now, sixteen days after, the wounds are healed and the fracture uniting favourably, while the little fellow has never exhibited a bad symptom; certainly none of injury to the brain or fracture of the skull. Bleeding from the ear, although a symptom of fracture of the skull, is not one of much value, and cannot in this case be said to be one at all, as it was in small quantity, soon ceasing, and more particularly as it was unaccompanied by any other sign of mischief.

On inspecting the ground where the accident occurred, there seemed nothing that could lessen the full weight of the cart taking effect. It is, therefore, not a little remarkable that the child should have escaped with such slight injuries. Your obedient servant,

Polmont, N.B., May 20th, 1872. ALEX. W. MACFARLANE.

HOSPITAL SUNDAY.

THE Vicar and Churchwardens of St. Matthew's, City-road, have decided on establishing a Hospital Sunday. The offertories during the second Sunday after Trinity will be given to the Royal Hospital for Diseases of the Chest, City-road, and the North-Eastern Hospital for Children, both of which institutions benefit the poor of the parish and neighbourhood.

Mr. Dowell's letter shall be answered next week.

SUBSTITUTION OF CARBOLIC OR PHENIC ACID FOR CREASOTE.

To the Editor of THE LANCET.

SIR,—The value of the wood creasote of Reichenbach as a remedial agent, and its employment in the preservation of articles used as food, has been fully proved during the forty years we have been manufacturers of this article. Of late years its reputation has suffered from the substitution of carbolic or phenic acid for it; and as no good test to distinguish these two bodies has been published (and those of our Pharmacopœia are for this purpose useless), I shall feel obliged by your publishing a very simple means of distinguishing them, which my son, Mr. Thos. Morson, has discovered in making some experiments upon adulterated samples recently submitted to us. This test is glycerine, in which true creasote is *insoluble*, or nearly so. Carbolic acid, on the contrary, *dissolves in all proportions*, and any large amount of this latter substance, if mixed with true creasote, will render the creasote soluble. The danger of substituting carbolic acid for creasote to be used internally or for food is well known. To test a suspected sample, mix it with an equal quantity of pure glycerine. If they unite and make a clear solution, the sample is carbolic acid, or contains a large percentage of it. Yours obediently,

Southampton-row, May 16th, 1872. T. N. R. MORSON.

MAURITIUS.

WE have received a copy of the Report of Dr. Edwards, the Registrar-General of this colony, for the past year, from which we glean a few facts regarding the state of the island as respects the prevalence of fever. People are very little interested in events that occur at a distance, unless they are likely to influence themselves, otherwise the modern medical history of the Mauritius would have attracted a larger amount of public attention than it has done. It is not many years ago that an endemic disease, which had previously played an insignificant part in swelling the death-rate of the station, assumed epidemic proportions of such dimensions that the late Governor, Sir Henry Barkley, we believe, declared that the sickness and mortality had not been paralleled since the days of Old Testament history. From that time to the present, malarious fever and dysentery have prevailed in the island, though not to anything like the same extent. Early last year fever declared itself with great virulence in the district of Grand Port; but the mortality was not great. In the month of April, especially after the heavy rains, the disease seems to have spread pretty generally; out of 128 deaths in the month, 63 were caused by fever, and dysentery of a malarious character was also prevalent and fatal. In the March quarter the proportion of deaths from fever alone in Saranne was 47 per cent., although the mortality-rate was not much higher than the average of former years. The proportion of deaths from fever and dysentery in the second quarter of the year in Saranne formed 72 per cent. of the total mortality.

T. K.—1. The person alluded to is legally qualified.—2. Our correspondent had better use his own discretion in the matter.

A. C.—Taylor's.

EPISTAXIS.

To the Editor of THE LANCET.

SIR,—It is an undoubted fact that hæmorrhage from the nose can, in many instances, be at once arrested by simply elevating the arms high above the head; for this is vouched for both by professional and domestic authorities. Wishing to find out the *rationale* of its action, I have looked into several standard authorities in the expectation of meeting with some explanation of its efficiency, but with no results. As the following has occurred to me as sufficient to explain its mode of action, which, for aught I know, may be the generally received opinion, spite of my finding no mention of it in any book at my command, I venture to ask you to give insertion to it in your columns.

If anyone will take the trouble of elevating his arms as high as possible, he will find that the cavity of the thorax will be simultaneously considerably extended, as shown by the sudden respiratory effort which ensues, just as is the case, in fact, in Silvester's physiological method of inducing respiration in apnœa. But the expansion of the chest here not only influences the amount of air admitted into the lungs, but the tendency towards the formation of a vacuum also causes the venous blood to rush from the neighbouring veins towards the heart. Thus is occasioned that lamentable accident which every now and then occurs as the result of incising a vein in operations at the root of the neck—viz., the admission of air into the circulation. So great, too, is this suction-power of the chest in expiration that, under the observation of Mr. De Morgan, two or three forcible inspirations have been sufficient to empty a greatly dilated saphena vein in the groin. Such then, I think, would create a diversion of the blood sufficient to arrest the hæmorrhage from the mucous membrane of the nose, supposing it were venous (for to be efficient such actions must not be continuous); and even if arterial, why not?—looking at the fact that in the alternate rise and fall of the brain, as seen when it is exposed, the rise of the cerebral substance is seen to be synchronous with expiration, and *vice versâ*. Yours obediently,

Burslem, May 18th, 1872. JOHN ALCOCK.

DR. MORGAN'S WORK ON CONTAGIOUS DISEASES.

Messrs. Baillière, Tindall, and Cox, the publishers of Dr. Morgan's work on Contagious Diseases, recently reviewed in this journal, have written to us in regard to our expression of disapproval of the method in which the book was advertised. Our correspondents, while they allow that the review was otherwise a perfectly fair one, desire to remove any personal reflection that might otherwise fall upon Dr. Morgan, by stating that he had nothing whatever to do with this method of advertisement.

"We printed about 50 cards with the title of the book upon the reverse side, and which we sent out in the ordinary business course to each member of the 'Contagious Diseases Commission,' to about a dozen others in the profession specially interested in the subject, and to the principal medical booksellers, simply to give notice that the work which had previously been announced in all the medical journals was ready."

Nemo, (Newport, Monmouth.)—We find no allusion made to such an appointment in the Medical Directory. Will our correspondent indicate the page in which such mention is made?

Dr. Nursey—Two or three years. We think about the end of 1869.

PUBLIC WAITING-ROOMS FOR WOMEN.

To the Editor of THE LANCET.

SIR,—Knowing you take a great interest in the subject of sanitary reform, I venture to say a few words upon public places of accommodation for women only, of which there seems to be a great need.

At our institution we find many women who are not patients use the closet set apart for females. It must be patent to the medical profession that some of the peculiar diseases of women are aggravated through a forced retention of urine. I communicated with Mr. Faulkner, the lavatory manager at Victoria station, who stated the necessity for such places had long been under his notice; but hinted that it was a difficult scheme, and would almost require a Company to carry out.

Hoping this crude idea may meet the eyes of some influential sanitary reformers, I am, Sir, your obedient servant,

May 25th, 1872. A MEDICAL DISPENSER.

A NEW REMEDY FOR SNAKE-BITE.

THE Australian papers, we observe, continue to be inundated with instances of recovery from snake-bite, and the happy terminations of which are ascribed to the efficacy of the mode of treatment recommended by Dr. Halford—viz., the injection of ammonia into the veins; but, like most newspaper stories, these accounts partake largely of the sensational, whilst their real points are lost sight of. The *Melbourne Argus* of March 28th states as follows:—

"A certain man at Mitchell's station, Dairy, on the Woodiyalloack, named Edward Reynolds, was bitten on the little finger of the left hand by a black snake, and as no immediate medical assistance could be obtained, the usual bush treatment was resorted to of tying a ligature tight round the wrist, and freely cauterising the wound. He was then taken to Lillydale, a distance of fifteen miles, and by the time the doctor could see him he was in a profound coma, and at first the medical man had very small hopes of his recovery. He immediately injected a solution of ammonia into one of the veins of the right arm, with almost miraculous effect. In two minutes his patient showed unmistakable signs of relief, and after an interval of about the same time consciousness returned, and he was able to walk about as usual. The following day he rode back to the station, and seemed quite recovered."

In this case everything is ascribed to the stimulant effect of the ammonia, and nothing to probably the real cause of the man's escape from death: the tight ligaturing of the part above the bite, and the free cauterising of the wound, by which the entrance of the poison into the system was checked. Probably a good dose of brandy would have done as much good as the ammonia under the circumstances.

A Subscriber.—We cannot see the propriety of anyone calling himself "Dr." on the ground that he is about to become one. A homely proverb tells us that "there is many a slip 'twixt the cup and the lip."

Dimed-Albert W. Kastan, (Dresden.)—Our correspondent cannot register a German diploma in England. He must acquire a diploma from one or other of the licensing bodies here before being entitled to be registered.

THE communication of *Mr. Robert Garner* (Stoke-upon-Trent) shall be inserted next week if possible.

M.B. should apply to the Secretary of the Institution.

EVIDENCE IN FAVOUR OF VACCINATION AS A PREVENTIVE OF SMALL-POX.

To the Editor of THE LANCET.

SIR,—A few weeks ago I attended the following cases in my practice, which appear to me to place beyond any doubt, even to the greatest sceptic that efficient vaccination is not only a palliative, but a complete preventive of small-pox.

CASE 1.—Mrs. W——, aged thirty years, was taken with a severe attack of small-pox. Three months previously I vaccinated her child, then three months old; the arm took in all three places. She persisted against all advice and persuasion to nurse her baby, come what may. The child slept with its mother the whole time, and she nursed it throughout, and the infant had no attack of small-pox or even illness, except slight functional derangement of the stomach and bowels. The mother was confined to bed for fourteen days, and made a complete recovery.

CASE 2.—The mother of twins, aged thirty-six years, had a moderate attack of small-pox. One of the twins was vaccinated two months before; but the other she would not have done on account of some eruptions about the head. The one that was vaccinated had no small-pox; the other, equally as strong and healthy, had small-pox and died. Both slept with the mother.

CASE 3.—A child two months old, not vaccinated, had small-pox, and died. There were five more of a family under eight years old, living under the same roof, and sleeping in the same apartment. These, who were all well vaccinated, escaped the contagion. The father, aged thirty-six years, had a severe attack, but recovered.

These facts, I believe, are no mere accidents, but a guarantee to a system which, if effectually carried out, will be a sufficient proof against the severest attack of variola.

I am, Sir, yours truly,
Callington, May, 1872. A. MACKINTOSH, M.D.

A Constant Reader.—We can assure our correspondent that our information upon the subject of his letter was drawn from a perfectly trustworthy source. We need not tell him that India is a very large place; but we may remind him that a European may live there even longer than he has done, and yet be perfectly ignorant of customs which, in their primitive form, exist only in certain tribes or localities. He may even, as we think our correspondent shows, be ignorant of a custom that prevails very extensively among native women.

Mr. H. H. Mercer (Tibagy, Brazil) has our thanks for his communication. Why not get a sample of the remedy forwarded to some hospital in Brazil for the purpose of getting its effects tested there?

Dr. Gariel, (St. Heller's.)—Our correspondent's letter shall be published in the next number of THE LANCET.

Mr. W. E. Hacon.—Thanks. The matter may probably come under our consideration.

A Medical Student.—1. The term is loosely applied by the advertising fraternity to any urethral discharge.—2. Yes.—3. Varicocele can be relieved by mechanical appliances, or cured by an operative measure.

Dr. Lush, (Weymouth.)—We believe that our correspondent may procure the work of Messrs. Trübner and Co.

Mr. Thomas L. Couch.—It seems to us that, in the circumstances of the case mentioned, the master is responsible. Speaking generally, a master is not under obligation to provide medical attendance or medicines for his domestic servant, unless he has expressly stipulated so to do; but if the master requests the doctor to attend, he becomes liable for the bill. This principle is recognised by the Judges, and most properly so. Our correspondent should sue in the County Court if necessary.

A. P. Z. asks whether a L.S.A. can call himself a surgeon-accoucheur. Not if he has any regard for truth.

DIPSOMANIA AND DRUNKENNESS.

DR. SKAE, of Edinburgh, insists upon the clear and certain diagnosis which may be made between dipsomania and drunkenness. In the dipsomaniac there is a genuine disease of the nervous system, often hereditary, and displaying itself in periodic paroxysms. These paroxysms are preceded by general perturbation of the system. "The patient is sleepless, is ill at ease; he has a perspiring skin, a quick soft pulse, and experiences a feeling of nervous prostration so great that he is driven to the use of stimulants for relief from his suffering. In the intervals such a man very frequently abhors the very sight and smell of strong drink; he is, while his disorder is in abeyance, amiable, and exemplary in the discharge of his duties, and is frequently possessed of mental endowments of a high order. How different is the condition of the sot, who drinks for the sake of drinking, and the pleasure he derives from the gratification of his appetite! The habitual drunkard is never exemplary in the discharge of his obligations; he does not drink in insane paroxysms, followed by bitter repentance, but quietly makes up his mind that drunkenness is happiness; and indulges his vice for the pleasure he experiences in doing so." The moral is, that whilst there is little hope from medical treatment in the case of drunkards, dipsomaniacs may and ought to be confined at the earliest possible date.

Mr. C. F. Harding, (Whittlesea.)—The point at issue cannot be considered except with reference to the rules of the particular society.

THE INDIAN MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—I am told you have before now befriended the public services and the medical profession generally; so I take the liberty of asking you to be the means, if possible, of serving the Indian medical services, and of saving me individually from professional ruin.

My tale, a very simple one, and one which will be very briefly told, is as follows:—I was a student in one of the most celebrated London hospitals, and in due time was considered worthy of being appointed a house-surgeon in it. I am fully qualified as a physician and surgeon, and had good prospects at home; but, owing to the *res angusta domi*, I was compelled to enter the public service. I competed very successfully for an appointment in the Indian medical service, and at the final examination at Netley was again fortunate in getting a high place on the list of assistant-surgeons. I have been a few years in India, and have no great reason of complaint in the matter of pay, which I consider, at present, is as liberal as a man of my age can expect; but I do complain of being kept in charge of a native regiment, without the slightest chance (as I have not interest) of bettering myself—mind you, *not pecuniarily*, but professionally. I dare say I need not tell you that the medical and surgical practice in the hospital of a native regiment is of a very mild and uninteresting nature; the regimental hospital and its belongings are of the most primitive description; and my opinion (founded on the experience I have already had, though limited as it has been) of such a charge is, that in a few years more of regimental hospital duty I shall have become professionally extinct. I work hard, and take as much interest as I can in such unsatisfactory and uninteresting patients, and would fain hope that the authorities consider me zealous and careful in the discharge of my duties. But the worst part of the arrangement is, that even my professional brethren, after a few more years of my present duty, will consider me, as they consider many more at the present time who are similarly situated, to have become professionally useless, as "you know he has only been in charge of a native regiment"; and the chances are that, if I am alive and in the service some twenty-two years hence, this circumstance will weigh heavily against me when I am placed in the scales for promotion to the rank of Deputy Inspector-General of Hospitals *by selection*.

The Inspector-General of Hospitals is naturally the person to whom all in the service look for advancement; but in these days of sanitary commissioners and inspectors-general of all sorts and descriptions, his patronage is nominal, and almost entirely confined to military appointments. A reorganisation of the Indian medical services is sadly needed, and is well worthy of the speedy and careful consideration of the Government and of all who take any interest in the services; and I am but one of many medical men in India who believe that the glory of the noble old service has departed; that the status of, and prospects of advancement in, the Indian medical services, as at present constituted, are not what they should be; and, in a word, that the inducements offered to young medical men to enter the service are little better than "delusions and snares." The pay, too (staff pay), of medical officers of regiments, *when surgeons*, is considerably less than that of other officers of the same or even of inferior army rank holding appointments in a regiment, and the retiring allowances of military men are also much in excess of the pensions allowed to medical officers. A military officer, if he wishes to serve for it, can retire on some £12000 a year; but the medical officer can only reach the highest pension of £550 a year after thirty years' service; or if he has the good fortune at the end of his service to be promoted by selection to the rank of Deputy or Inspector-General of Hospitals, and puts in his full service of five years in either grade, he can in the former case retire on £300 a year, or in the latter on £900 a year—not a very liberal income after thirty-three years, or perhaps longer, spent in India.

Would not native medical men who have graduated at the Presidency Medical Colleges be better adapted to hold the charge of native regiments than Europeans, who have spent (or rather who soon after arrival in India find they have *mis-spent*) a large sum in learning their profession so as to meet the requirements of European practice? And if this measure was carried, would not a very great saving be effected by the reduction of the establishment of European medical officers, who are paid for performing almost sinecure duties, from the lengthy performance of which *they must professionally deteriorate*?—duties which would be just as satisfactorily performed, so far as the interests of the native patients and the State are concerned, by the native graduates of any of the Medical Colleges in India. The European officers of native regiments and their families could still have European professional attendance, as there is not, I believe, a station for native regiments, except perhaps on the north-west frontier, in which there are not the medical men belonging to the European regiment, or else there is a civil surgeon.

I remain, Sir, yours truly,
April, 1872. PALMAM IN INDIA.

THE LADIES AS SANITARY REFORMERS.

THE work of sanitary reform is sufficiently wide and varied to engage the energies of different classes of workers. It is satisfactory to learn, therefore, that a number of ladies have formed a Women's Society for the cultivation of the knowledge and practice of the laws of health. It is proposed to make the Society useful in cases of sanitary difficulty, in inducing schools to include sanitary instruction in their teaching, in the formation of local societies—in short, in the removal of the great obstacles that have hitherto impeded the progress of the people in material comfort and well-being.

A Subscriber asks us to recommend an optician who will test vision for spectacles in the way indicated by Mr. Wells. He might as well ask us to recommend a druggist who would prescribe scientifically. The business of an optician is not to test vision, but to sell spectacles, and sometimes to make them. To test vision, and thence to prescribe spectacles, forms an important branch of ophthalmic surgery, and is done by medical practitioners.

Mr. Swinhoe, (New Swindon.)—Thanks. The newspaper cutting arrived too late for notice this week.

HOSPITAL FOR INFECTIOUS DISEASES, COLCHESTER.

To the Editor of THE LANCET.

SIR,—My attention has been called to an extract from your impression of the 18th inst., under the above heading, which I cannot allow to pass unnoticed. You state that "a Poor-law inspector proceeded from London to inspect the site and building, and gave it as his opinion that the former was an eligible one"; and then you proceed to censure the Board of Guardians for having completed the building, and to twit them for not having sufficiently honoured "the prophet of their own," Dr. Bree.

You have been rightly informed of the fact that "a Poor-law inspector" (Mr. Longley) reported favourably as to the site; but you have not been made acquainted with the fact that Dr. E. Smith, the *medical inspector* of the Poor-law Board, subsequently made a special inspection of the site, and pronounced it to be "unexceptionable." It was *thereupon* that the Board of Guardians directed the contractor to complete the work, in direct deference "to the judgment of those who possessed the requisite medical and sanitary knowledge to constitute them safe guides in this matter," which you have been led to think the guardians have ignorantly and wilfully disregarded. From beginning to end this work has been the work of the Poor-law Board, *not* that of the Board of Guardians.

Yours obediently,

Lexden Manor, May 27th, 1872. PHILIP O. PAPILLON, Chairman.

*** Our information was derived from one of the local papers, and we may congratulate the Board of Guardians that the work was none of theirs.—ED. L.

Delta, (Worcester.)—The very naughty rude boys inquired after by our correspondent have not again been seen in the neighbourhood of THE LANCET Office. When last heard of, they had run crying to their grandmamma, with an account of the whipping they had received, and they assured her that they had not provoked it by any impertinence to speak of. The simple-minded old lady is supposed to have believed them; for she has allowed them to tell their story to the whole of her small circle of friends.

AN "Army Surgeon," writing to the *Irish Times*, in speaking of the great relative immunity from small-pox enjoyed by the troops at his station, among whom revaccination has been most carefully carried out, suggests that the clergy of all denominations and the employers of labour might with great advantage impress upon those coming within their influence the advisability of being revaccinated, if this operation has not been performed within the last seven years.

COMMUNICATIONS, LETTERS, &c., have been received from—Prof. Humphay; Dr. A. E. Sansom; Dr. Harding, Whittlesea; Mr. Unsworth, Liverpool; Mr. J. W. Barnes; Dr. Nursey; Dr. Lawrence; Dr. Grieve; Dr. Murray, Wickham; Dr. Masters; Mr. Macpherson, Cork; Mr. Hoskins, Odiham; Mr. J. Spofforth, Canterbury; Mr. Young, Lostwithiel; Mr. Fitzgibbon, Sittingbourne; Dr. St. Maur, Vienna; Mr. Cooke, Stroud; Dr. Collins, Wolverhampton; Dr. Sutherland; Mr., Parkin, Bristol; Mr. Ebsworth; Mr. Clarke, Bicester; Mr. Nicholson, Padiham; Mr. W. Ramsay, Foxton; Mr. Morgan, Monmouth; Mr. Chater, Swindon; Mr. Nash, Kimbolton; Dr. Mackintosh, Callington; Dr. Beau, Paris; Dr. Manby, East Rudham; Mr. Mercer, Tibagy, Brazil; Dr. Tiry, Brussels; Dr. Marshall, Mortlake; Dr. Goodman, Southport; Mr. C. Read; Mr. Watson; Dr. Kenyon, Manchester; Dr. F. P. Smith; Mr. J. Graham; Mr. G. Tatham; Mr. Belcher, Burton-on-Trent; Mr. Moore, Stourport; Mr. Papillon, Lexden Manor; Mr. Reeves; Mr. Claridge; Mr. Lovesey; Mr. Morland; Mr. Collins, Southall; Mr. Wood, Bromsgrove; Mr. Craven, Ovingdean; Dr. Stevens; Mr. W. Rivington; Dr. Woodman, Ipswich; Mr. Whitaker, Walsingham; Dr. Hollingsworth, Rathfriland; Mons. Gariel, St. Heliers; Mr. Newland, Croyland; Dr. Buchanan, Glasgow; Dr. Wm. Lee, Washington, U.S.A.; Mr. Morris, Guisborough; Dr. Coombs, Castle Cary; Dr. Kastan, Dresden; Dr. Hamilton, Ashton-under-Lyne; Messrs. Fox and Co., Manchester; Mr. Holman; Dr. Lush, Weymouth; Mr. Hendry; Messrs. Baillière & Co.; Dr. Davidson, Liverpool; Mr. Stiles, Dolannoga; Dr. Black; Dr. Donnell, Richmond; Mr. Jones; Mr. Gregory, Newtown; Dr. Foster, North Curry; Mr. Steel, Ely; Mr. Austin; Mr. Robins, Catford Bridge; Mr. Chambers; Mr. Sandford, Fintray; G. B.; A Subscriber; A. P. Z.; D. H.; Nemo; A. C.; The Secretary of the London Institution; A Medical Dispenser; Student; T. K.; E.; T. M.; &c. &c.

Drawing-Room Gazette, Mansfield Advertiser, Newcastle Daily Chronicle, Edinburgh Courant, Dublin Evening Mail, Luton Advertiser, Metropolitan, Canada Lancet, and *Cumberland Advertiser* have been received.

Medical Diary of the Week.

Monday, June 3.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—2 P.M. General Monthly Meeting.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Timothy Holmes, "On the Surgical Treatment of Aneurism in its various forms."

Tuesday, June 4.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 3 P.M.
ROYAL FREE HOSPITAL.—Operations, 3 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. Edward B. Tylor, "On the Development of Belief and Custom amongst the Lower Races of Mankind."

Wednesday, June 5.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Timothy Holmes, "On the Surgical Treatment of Aneurism in its various forms."
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Dr. Matthews Duncan, "On long delay of Labour after Discharge of Liquor Amnii."—Dr. Aveling, "On Post-mortem Delivery."—And other papers.
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Mr. Chas. Cubitt: "Remarks on the Homological Position of the Members constituting the Thecated Section of the Rotatoria."—Mr. Isaac Roberts, "On a Micro-Pantograph."

Thursday, June 6.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Tyndall, "On Heat and Light."

Friday, June 7.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Timothy Holmes, "On the Surgical Treatment of Aneurism in its various forms."
QUEKETT MICROSCOPICAL CLUB.—8 P.M.
ROYAL INSTITUTION.—9 P.M. Dr. Odling, "On the History of Ozone."

Saturday, June 8.

HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Roscoe, "On the Chemical Action of Light."

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Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday; those from the country must be accompanied by a remittance.